



Perfectionism and Psychological Distress among Chinese Judges: Do Age and Gender Make a Difference?

Wenwen Kong^{1,2}, Hui Wang¹, Jianmei Zhang³, Danhong Shen⁴, *Danjun Feng¹

1. School of Nursing and Rehabilitation, Cheeloo College of Medicine, Shandong University, Jinan, Shandong 250012, China
2. Hospital of Stomatology, Cheeloo College of Medicine, Shandong University, Jinan, Shandong, 250012, China
3. College of Mechanical and Vehicle Engineering, Linyi University, Linyi, Shandong 276000, China
4. The First Hospital of Jilin University, Changchun, Jilin 130021, China

*Corresponding Author: Email: fdj19@sdu.edu.cn

(Received 12 May 2020; accepted 24 Jul 2020)

Abstract

Background: Judges may experience mental health problems, which reduces their performance in juridical cases, and constitutes a great threat to both the authority of law and social justice. This study aimed to assess the prevalence of psychological distress among judges and examine the effect of perfectionism on psychological distress with age and gender as the moderators.

Methods: This survey was carried out in person with 565 Chinese judges in 2016, using the Almost Perfect Scale-Revised and the Kessler Psychological Distress Scale. The effects of perfectionism on psychological distress was explored by Structural Equation Model (SEM), and the moderating effects of age and gender were tested by Multi-group analysis.

Results: Psychological distress was reported by 89.20% of the judges surveyed. Discrepancy had a significant positive effect on psychological distress, but order had a significant negative effect on psychological distress, with high standards exerting no significant effect. Age had a significant moderating effect, whereas the moderating effect of gender was not significant.

Conclusion: The three dimensions of perfectionism exerted different effects on psychological distress of Chinese judges, and the relationships were moderated by age.

Keywords: Judge; Mental health; Perfectionism; Moderating effect; China

Introduction

As a critical component of juridical system, judges play an important role in maintaining both social justice and the authority of law. Hence, all judges should be able to perform their tasks rationally. However, judges are under great professional pressure, which may affect their ability to make proper decisions in judicial cases (1-3). Furthermore, there is abundant empirical evidence

that supports the close association between occupational stress and mental health problems (4). Mental health problems can affect the decision-making of judges (5), and indirectly constitute a great threat to the efficiency of the legal system. However, to the best of our knowledge, there has been very little research worldwide focused on the mental health of judges (6). Therefore, the



first goal of the current study was to assess the prevalence of psychological distress (a nonspecific negative emotion) among Chinese judges.

Perfectionism is one of the traits that can contribute to a person being vulnerable to mental health problems when in a stressful environment. There are many scales to measure perfectionism. The Frost Multidimensional Perfectionism Scales (FMPS) and the Hewitt Multidimensional Perfectionism Scale (HMPS) are the most frequently used scales. These two scales support the two-factor model of perfectionism: adaptive perfectionism and maladaptive perfectionism (7). The Almost Perfect Scale-Revised (APS-R) (8) is used comparatively less than FMPS and HMPS, but it supports the three-factor structure: high standards (the adaptive perfectionism), discrepancy (the maladaptive perfectionism), and order.

The characteristics of discrepancy include “prevailing criticisms of one’s own performance and achievements, the fear of flaws and negative responses to failures, as well as strong feeling of social pressure to be perfect” (9). Not surprisingly, the negative association between discrepancy and mental health has been confirmed by nearly all of the existing studies (10,11). Perfectionists with high standards are “focused on their high personal standards as well as strive for perfection and achievements” (9). There are inconsistent, even conflicting, conclusions about the relationship between high standards and mental health (12-15). Although the relationship between discrepancy, high standards, and mental health is widely explored in students, athletes, and medical personnel, it has not yet been studied in judges, who usually suffer from higher stress (3), especially judges in China who are facing a litigation explosion due to the continuous and in-depth reform.

Order emphasizes the importance of organization, precision, and tidiness (8). Many researches that used the APS-R omitted the order subscale because they regard it as a negligible aspect of perfectionism (16). However, empirical studies of the internal structure of perfectionism supported that order is also an integral part of perfectionism (17-19). Only a few studies have explored the

effect of order on mental health. Order was negatively related to high school students’ anger (20). In addition, a study found order was positively related to self-efficacy, but negatively related to depression (19). It can be speculated that order may be a protective factor of mental health. Therefore, the current study will focus on the effect of order, as well as discrepancy, and high standards on mental health using the APS-R to measure perfectionism.

At present, some studies have noted gender differences in the expression of perfectionism, and the findings were inconsistent. For example, Ashby et al. did not find gender differences in discrepancy and high standards perfectionism in adults (21), but another study showed that female students have higher discrepancy, high standards, and order perfectionism scores than male students (17), and another study found male students had higher socially prescribed perfectionism (maladaptive perfectionism) scores than female students (22). In contrast, studies have consistently indicated that women have more stress (23), anxiety, and depression (2) than men do. These results suggest it is important to consider gender when understanding the link between perfectionism and depression. For instance, adaptive perfectionism interacted with optimism, to predict the reduction of depression in females but not males (24). In addition, socially prescribed perfectionism had a larger total effect on generalized anxiety symptoms in female college students (25). However, another study did not find gender differences in the relationship between depression, anxiety, and perfectionism among college students (26). Given the paucity of studies explored the role of gender in the relationship between perfectionism and mental health, it is crucial to explore the moderating role of gender in the relationship.

Perfectionism and mental health correlate with age. In a study, older group (32-35 yr old) had lower scores on concern over failure, parental expectations, doubts about actions (maladaptive perfectionism), and personal standards (adaptive perfectionism) than a younger group (18-22 yr old), while the organization score (i.e., order) did

not differ across age groups (27). Meanwhile, older adults (33-62 yr old) generally had lower perfectionism, stress and worry, and greater life satisfaction than younger adults (17-31 yr old) (28). Although the two studies provided important information, they used the age of 33 as the cut-off point for age grouping. Considering that the age of 45 is a critical time in the transition from youth to middle age, and that WHO has set the cut-off age between youth and middle age at 45, it may be better to divide adults into young and middle-aged groups at age 45. Moreover, the moderating role of age in the relationship between perfectionism and psychological distress remain unclear. Therefore, the second goal of the study was to explore the effects of three factors of perfectionism (i.e., high standards, discrepan-

cy, and order) on the psychological distress of judges, and the moderating effects of both gender and age in these relationships.

Methods

Participants

In 2016, 600 judges were surveyed at the Shandong Judge Training Institute (Shandong, China), and 565 valid responses were received representing a 94.16% response rate. The mean age of these judges was 46.60 yr (SD=7.42). The other demographics can be found in Table 1.

Oral or written informed consent was given by the participants, and the study was approved by our institution's research Ethics Committee.

Table 1: Discrepancy, high standards, order scores and prevalence of psychological distress according to socio-demographic characteristics of judges

| Variable | Discrepancy | | | High standards | | Order | | Psychological distress | |
|--------------------------------|-------------|------------|------|----------------|------|------------|------|------------------------|------|
| | n(%) | M(SD) | P | M(SD) | P | M(SD) | P | n(%) | P |
| Groups | | | | | | | | | |
| Gender | | | | | | | | | |
| Male | 408(72.2) | 3.86(1.01) | 0.00 | 4.87(0.97) | 0.21 | 5.29(0.93) | 0.29 | 365(89.46) | 0.75 |
| Female | 157(27.8) | 3.46(0.99) | | 4.75(1.07) | | 5.19(0.99) | | 139(88.54) | |
| Age | | | | | | | | | |
| ≤44 | 244(43.2) | 3.75(1.05) | 0.96 | 4.86(1.01) | 0.61 | 5.14(0.99) | 0.01 | 229(93.85) | 0.00 |
| ≥45 | 321(56.8) | 3.75(1.00) | | 4.82(0.99) | | 5.35(0.90) | | 275(85.67) | |
| Marriage | | | | | | | | | |
| Single/divorced/ widowed | 24(4.2) | 4.08(1.00) | 0.11 | 5.13(0.95) | 0.14 | 5.45(1.10) | 0.32 | 22(91.67) | 0.95 |
| Married | 541(95.8) | 3.74(1.02) | | 4.82(1.00) | | 5.25(0.94) | | 482(89.09) | |
| Education | | | | | | | | | |
| Secondary/ Advanced diploma | 34(6.0) | 4.15(0.92) | 0.02 | 4.76(0.84) | 0.72 | 5.12(0.83) | 0.23 | 28(82.35) | 0.40 |
| Bachelor's degree | 457(80.9) | 3.75(1.01) | | 4.83(1.01) | | 5.29(0.95) | | 409(89.50) | |
| Master's degree | 74(13.1) | 3.55(1.10) | | 4.91(0.99) | | 5.12(0.94) | | 67(90.54) | |
| Total | 565(100) | 3.75(1.02) | | 4.83(1.00) | | 5.26(0.94) | | 504(89.20) | |

Measures

Perfectionism

The APS-R (8) was employed to measure perfectionism. It has 23 items measuring high standards, order, and discrepancy. Items were scored using a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Cronbach's α of high standards, order, and discrepancy were 0.83, 0.76, and 0.91, respectively. The Confirmatory Factor Analysis (CFA) showed that the three subscales has good validity (each of the factor loadings of observed variables on latent variables is no less than 0.52; Fig. 1).

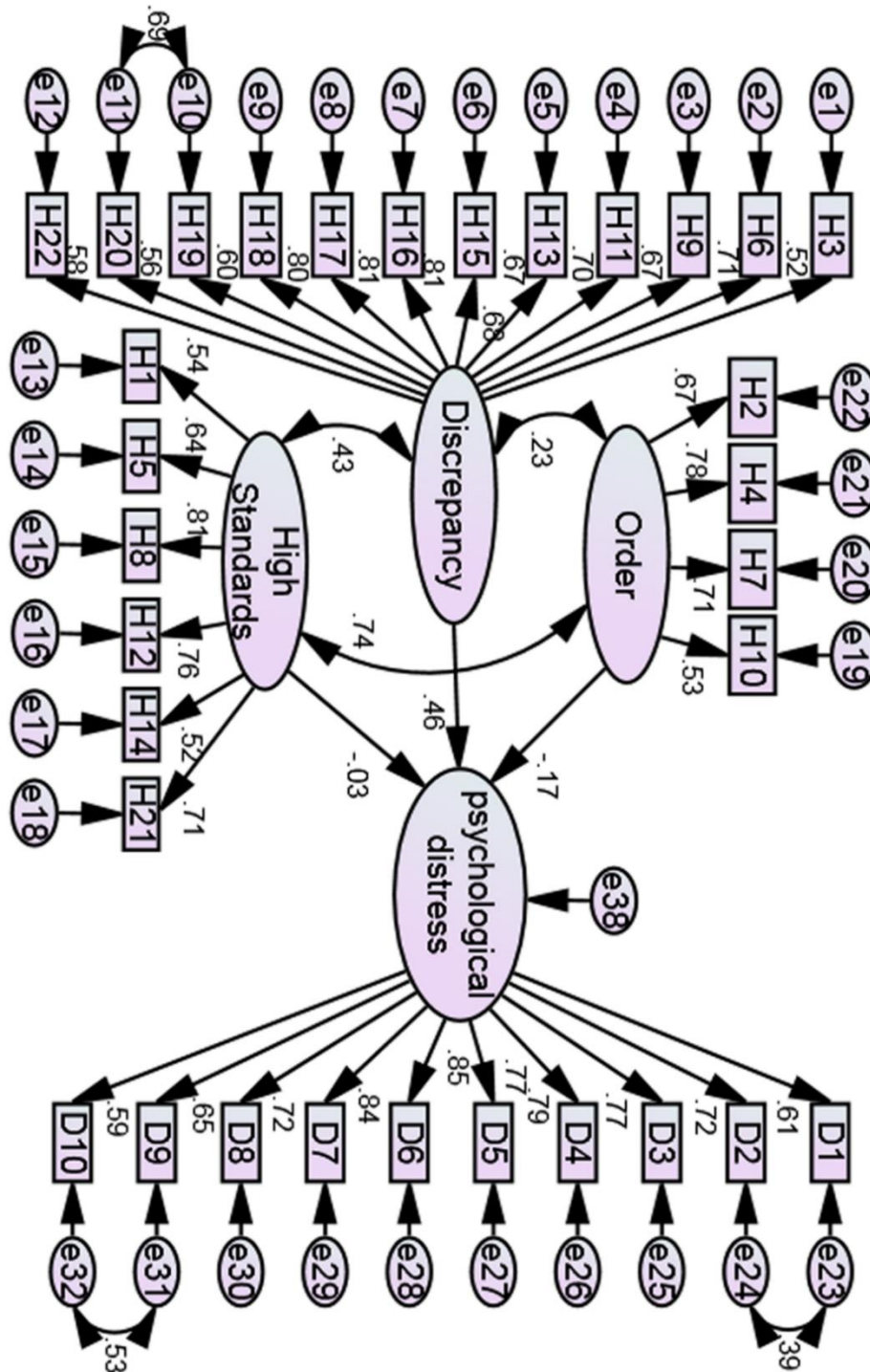


Fig. 1: Results of the SEM analysis of the effects of perfectionism on psychological distress. All the coefficients are standardized and significant at 0.001 level except for the order → psychological distress ($P < 0.05$) and high standards → psychological distress ($P > 0.05$)

Psychological distress

Psychological distress was measured using the Kessler Psychological Distress Scale (K10). K10 has 10 items and scored on a 5-point scale ranging from 1 (none of the time) to 5 (all the time). It's Cronbach's α was 0.92. The CFA indicated that the scale has good construct validity (the factor loadings of observed variables on psychological distress is no less than 0.59; Fig. 1). When the participant scores more than 16, he/she is regarded as psychologically distressed (29).

Analysis

Data analyses were computed by SPSS 22.0 (Chicago, IL, USA) and AMOS 22.0 (IBM Corporation, Armonk, New York, USA). First, *t*-tests, a one-way ANOVA and Chi-square tests were conducted to examine the differences in high standards, discrepancy, order scores and the prevalence of psychological distress across socio-demographic factors.

Second, the Pearson's product-moment correlation was conducted to examine the correlations among high standards, discrepancy, order, and psychological distress.

Third, this study adopted an SEM approach to examine the effects of high standards, order, and discrepancy on psychological distress. Several indices were used to determine whether the hypothesized model fits the sample data. When $\chi^2/df < 3$, RMSEA < 0.08 , CFI, GFI, and TLI > 0.90 , the fit is acceptable (30).

Last, the multiple group analysis feature of SEM was performed to examine the moderating effects of gender and age in the relationships between the three factors of perfectionism and psycholog-

ical distress. According to the age division proposed by WHO, the participants were divided into two age groups, namely the youth adult group (≤ 44 yr old) and the middle-aged group (≥ 45 yr old). In the multiple group analysis, the measurement weights, structural weights, structural covariances, structural residuals, and measurement residuals were restricted to ensure consistency between the different groups. If there are differences in goodness-of-fit statistics between the two adjacent nested models of unconstrained baseline model, restricted measurement weights, structural weights, and structural covariances, the moderator variable is considered to have a significant moderating effect. The critical ratios of differences (CRD) were used to determine which structural paths were significantly different in different gender/age groups. The two parameter estimates are significantly different when the absolute value of CRD is greater than 1.96.

Results

According to Table 1, as many as 89.20% of Chinese judges reported psychological distress. The judges with age ≤ 44 had the highest prevalence of psychological distress (93.85%). Univariate analyses indicated significant differences in order scores for age, and significant differences in discrepancy scores for gender and education.

Psychological distress was positively related with discrepancy, and negatively related with order, but not related with high standards. Furthermore, high standards, order, and discrepancy were positively related with each other (Table 2).

Table 2: Matrix of variables

| Variable | M | SD | Range | 1 | 2 | 3 | 4 |
|--------------------------|-------|------|-------------|--------|--------|--------|---|
| 1.Discrepancy | 3.75 | 1.02 | 1.00-6.92 | 1 | | | |
| 2.High standards | 4.84 | 1.00 | 1.00-7.00 | .359** | 1 | | |
| 3.Order | 5.26 | 0.94 | 1.00-7.00 | .225** | .649** | 1 | |
| 4.Psychological distress | 24.01 | 6.67 | 10.00-50.00 | .388** | -.001 | -.099* | 1 |

Note: * $P < 0.05$, ** $P < 0.01$.

The results of primary SEM analysis indicated the bad fit between the data and the hypothesized model. Hence, three pairs of error terms were

correlated according to the modification index (Fig. 1). Consequently, as a whole, an acceptable fit was obtained (Table 3).

Table 3: Goodness-of-fit statistics of the primary model and the modified models

| Steps Model Description | χ^2 | df | P | GFI | CFI | TLI | RMSEA |
|---|----------|-----|------|------|------|------|-------|
| 1 Primary model | 2022.50 | 458 | 0.00 | 0.80 | 0.84 | 0.83 | 0.08 |
| 2 Add covariance from to e10 to e11 | 1681.09 | 457 | 0.00 | 0.83 | 0.88 | 0.87 | 0.07 |
| 3 Add covariance from to e31 to e32 | 1505.15 | 456 | 0.00 | 0.85 | 0.89 | 0.88 | 0.06 |
| 4 Add covariance from to e23 to e24 (Final model) | 1420.27 | 455 | 0.00 | 0.85 | 0.90 | 0.89 | 0.06 |

Note: GFI, goodness of fit index; CFI, comparative fit index; TLI, Tucker Lewis Index; RMSEA, root mean square error of approximation.

The standardized estimates of the path coefficients for each variable are shown in Fig. 1. First, discrepancy had a significant positive negative effect on psychological distress ($\beta = 0.46$, $P < 0.001$), but order had a significant negative effect on psychological distress ($\beta = -0.17$, $P = 0.042$), with high standards exerting no significant effect ($\beta = -0.03$, $P = 0.727$). Second, high standards, order, and discrepancy were positively

related with each other, especially the correlation coefficient between high standards and order reached 0.74 ($P < 0.001$).

Table 4 showed the results of the multiple group analysis of SEM. The moderating effect of gender on the relationships between three factors of perfectionism and psychological distress was not significant. The respective male and female results are shown in Fig. 2.

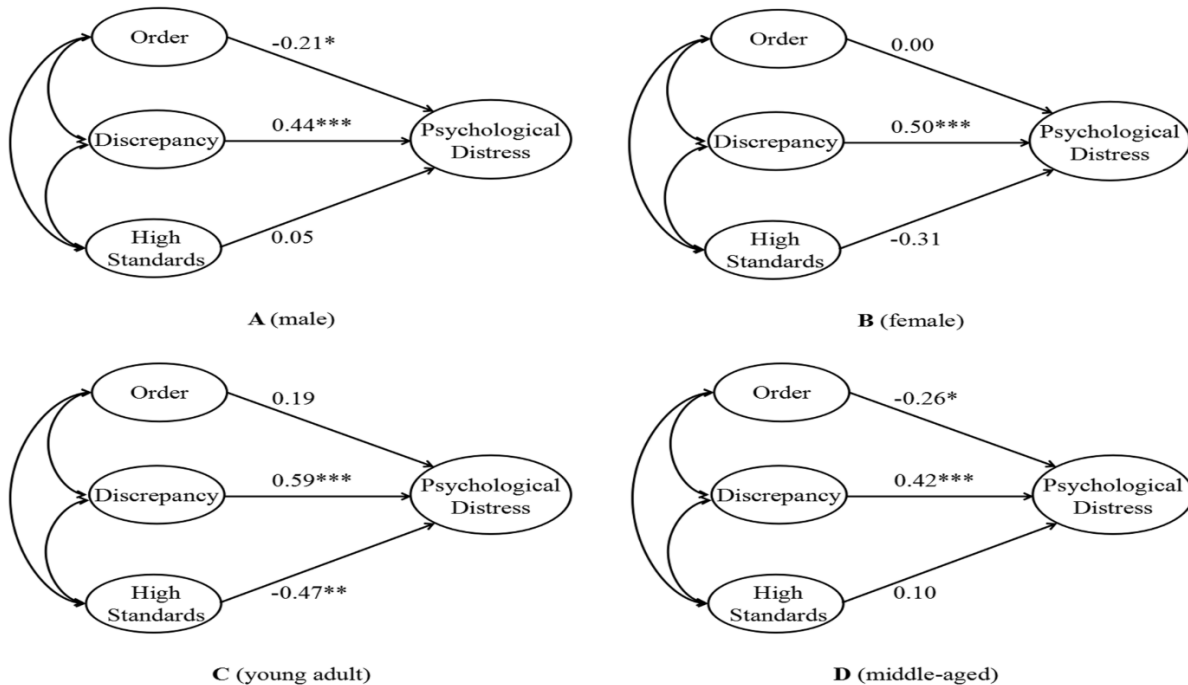


Fig. 2: Differences in the relationships among perfectionism on psychological distress among male (A), female (B), young adult (C), and middle-aged (D) judges. All the coefficients in the figures are standardized. Observed indicators for the latent factors are not shown. * $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$

The structural path from order to psychological distress was different to some degree. Specifically, order exerted a significant negative effect on psychological distress among males ($\beta = -0.21$, $P=0.022$), but no significant effect among females ($\beta = 0.003$, $P=0.988$). However, the difference between the two parameter estimates was

not significant (CRD = 1.148). In addition, the structural paths from discrepancy ($\beta = 0.44$ in male; $\beta = 0.50$ in female) to psychological distress and high standards ($\beta = 0.05$ in male; $\beta = -0.31$ in female) to psychological distress were not significantly different (CRD were -0.32, -1.47, respectively).

Table 4: Goodness-of-fit statistics for the multiple group analysis

| <i>Goodness-of-fit statistics</i> | <i>$\chi^2(df)$</i> | <i>P</i> | <i>$\Delta\chi^2(df)$</i> | <i>P</i> | <i>GFI</i> | <i>CFI</i> | <i>TLI</i> | <i>RMSEA</i> |
|--|--------------------------------|----------|--------------------------------------|----------|------------|------------|------------|--------------|
| Gender | | | | | | | | |
| Model with no restrictions | 1948.64(910) | 0.00 | | | 0.82 | 0.89 | 0.89 | 0.05 |
| Model with restricted measurement weights | 1988.77(938) | 0.00 | 40.13(28) | 0.06 | 0.82 | 0.89 | 0.89 | 0.05 |
| Model with restricted structural weights | 1991.51(941) | 0.00 | 2.74(3) | 0.43 | 0.82 | 0.89 | 0.89 | 0.05 |
| Model with restricted structural covariances | 1996.72(947) | 0.00 | 5.21(6) | 0.52 | 0.82 | 0.89 | 0.89 | 0.04 |
| Model with restricted structural residuals | 1996.82(948) | 0.00 | 0.10(1) | 0.75 | 0.82 | 0.89 | 0.89 | 0.04 |
| Model with restricted measurement residuals | 2081.72(983) | 0.00 | 84.90(35) | 0.00 | 0.81 | 0.89 | 0.89 | 0.05 |
| Age | | | | | | | | |
| Model with no restrictions | 1910.25(910) | 0.00 | | | 0.82 | 0.90 | 0.89 | 0.04 |
| Model with restricted measurement weights | 1940.46(938) | 0.00 | 30.21(28) | 0.35 | 0.82 | 0.90 | 0.89 | 0.04 |
| Model with restricted structural weights | 1948.84(941) | 0.00 | 8.38(3) | 0.04 | 0.82 | 0.90 | 0.89 | 0.04 |
| Model with restricted structural covariances | 1956.23(947) | 0.00 | 7.39(6) | 0.27 | 0.82 | 0.90 | 0.89 | 0.04 |
| Model with restricted structural residuals | 1956.38(948) | 0.00 | 0.15(1) | 0.70 | 0.82 | 0.90 | 0.89 | 0.04 |
| Model with restricted measurement residuals | 2023.58(983) | 0.00 | 67.21(35) | 0.00 | 0.81 | 0.89 | 0.89 | 0.04 |

Note: GFI, goodness of fit index; CFI, comparative fit index; TLI, Tucker Lewis Index; RMSEA, root mean square error of approximation.

The relationships between three factors of perfectionism and psychological distress were different among young adult and middle-aged judges (Table 4). Fig. 2 demonstrates that discrepancy had a significant positive effect on psychological distress in both the young adult group ($\beta = 0.59$, $P < 0.001$) and middle-aged group ($\beta = 0.42$, $P < 0.001$), and the structural paths were not significantly different (CRD = -1.53). The structural paths from high standards and order to psychological distress were identified to be significantly different (CRD were 2.79 and -2.10, respectively). Specifically, high standards had a significant negative effect on psychological distress in the young

adult group ($\beta = -0.47$, $P = 0.008$) but not in the middle-aged group ($\beta = 0.10$, $P = 0.358$), and order had a significant negative effect on psychological distress in the middle-aged group ($\beta = -0.26$, $P = 0.018$) but not in the young adult group ($\beta = 0.19$, $P = 0.231$).

Discussion

The majority of judges have psychological distress, and the young adult judges are at the highest risk of psychological distress. Hence, administrators should pay adequate attention to the mental health of judges, and provide judges with lec-

tures on how to improve their mental health, especially those of younger ages.

Male judges scored significantly higher on discrepancy than female judges. Inconsistent with previous researches, Sastre-Riba et al. found that female students reported higher levels of discrepancy perfectionism than male students did (17), and Ashby et al did not find gender differences regarding discrepancy in adults (21). The middle-aged judges obtained higher order perfectionism, which was inconsistent with the research that found a negative association between age and order scores in children and adolescents (17). Hence, the trajectory of order over time might not be linear.

The negative effect of discrepancy on mental health was re-confirmed in both the whole sample and the age/gender groups, which was consistent with the existing research (10,11). Perfectionists with high discrepancy focus on the negative aspects of performance, and they are overly concerned with social evaluation and afraid of making mistakes. They also experience little satisfaction even when their standards are attained. Therefore, they have worse mental health. As the judges with trait discrepancies are more prone to suffering from mental health problems, this group should be paid particular attention to regarding their mental health. Furthermore, it is important for the judges to be aware of the potentially negative consequences of high levels of discrepancy perfectionism. Efforts to change the unhelpful thinking styles associated with discrepancy may be an effective intervention.

The results regarding the effects of high standards on psychological distress were very interesting. The high standard perfectionism trait could help individuals achieve their goals and make people enjoy the effort process. Therefore, high standards have a positive effect on mental health. However, the effect was only found in the young adult judges. A possible explanation is that young adults are in the developing stage of both life and work. They usually have enormous potential, and they are more likely to achieve high standards by their persistent efforts, give them a sense of accomplishment and maintain good mental health.

In contrast, middle-aged people have entered a bottleneck period of work and life, and it is difficult for them to make big improvements and meet their high standards, which could give them a sense of frustration and reduce their mental health. These results may explain the inconsistent conclusion of the existing studies (13,14,31). More specifically, it is possible that one study's results regarding the effect of high standards on mental health was closely related to the participants including their gender, age, occupation and so on. Certainly, the overlap between high standards and discrepancy also contributes to the existing inconsistent results (13). Hence, future study should control for this overlap in order to explore the unique contributions of the dimensions of perfectionism to psychological outcomes (32). Therefore, the current study employed the SEM approach to examine the effect of each dimension of perfectionism on mental health, taking into account the correlations of the three dimensions of perfectionism, regarded as a statistical control.

The effect of order on mental health has largely been ignored previously. This study found that order could reduce judges' psychological distress. This may be due to the nature of their job, which includes a series of procedures and rules, and this kind of work may be more appropriate for those who like to be organized and disciplined. In addition, a previous study may have provided another explanation for the relationship between order and psychological distress. Nakano indicated that order could improve one's self-efficacy, negatively correlated with depression (19). The other important finding was that order could reduce psychological distress in middle-aged judges, but not in young adult judges. The possible explanation is that middle-aged judges generally have higher positions, which afford them more resources and greater control to meet their demands for order. In addition, order also had a positive effect on males' mental health, but not that of females. This suggested that order may be a protective factor only for males' mental health.

This is the first study to provide empirical evidence regarding the relationship between perfec-

tionism and psychological distress across different gender and age groups. In view of the inconsistent results pertaining to the relationship between high standards and mental health among different participants, and the limited studies on the relationship between order and mental health until now, future studies need to verify the findings of our study on Chinese judges, especially the moderating effects of age and gender.

This study has several limitations. First, the cross-sectional design cannot ascertain the causal relationships among variables. Therefore, the direction of the relation between any two research variables in the current study is still based on the existing literature, and a longitudinal design is needed in the future. Second, all of the participants came from one province in Eastern China and therefore cannot be representative of all the other areas of China. Further, considering the vast differences in the juridical system and people's personality traits, including perfectionism, between China and other countries, the results of the current study should be generalized to other counties with caution.

Conclusion

A very high proportion of Chinese judges are experiencing psychological distress. Discrepancy exerted a positive effect on psychological distress, order had the negative effect, and high standards had no significant effect. The relationship between perfectionism and psychological distress was moderated by age.

Ethical considerations

Ethical issues (Including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc.) have been completely observed by the authors.

Acknowledgements

This work was supported by the Young Scholars Program of Shandong University under Grant number 2017WLJH42.

Conflicts of interests

The authors declare that there are no conflicts of interests.

References

1. Chamberlain J, Miller MK (2008). Stress in the courtroom: Call for research. *Psychiatry Psychology and Law*, 15(2):237-250.
2. Flores DM, Miller MK, Chamberlain J, et al (2008). Judges' perspectives on stress and safety in the courtroom: An exploratory study. *Court Review*, 45(3):76-89.
3. Tsai FJ, Chan CC (2010). Occupational stress and burnout of judges and procurators. *Int Arch Occup Environ Health*, 83(2):133-142.
4. Harvey SB, Modini M, Joyce S, Milligan-Saville JS, et al (2017). Can work make you mentally ill? A systematic meta-review of work-related risk factors for common mental health problems. *Occup Environ Med*, 74(4):301-310.
5. Bishop SJ, Gagne C (2018). Anxiety, depression, and decision making: A computational perspective. *Annu Rev Neurosci*, 41:371-388.
6. Hou Y, Li YX (2008). Relationship between job-burnout and mental health of judges. *Chinese Journal of Industrial Hygiene and Occupational Diseases*, 26(6):365-366.
7. DiBartolo P, Li C, Frost R (2008). How do the dimensions of perfectionism relate to mental health? *Cognitive Therapy and Research*, 32(3): 401-417.
8. Slaney RB, Rice KG, Mobley M, et al (2001). The revised almost perfect scale. *Measurement and Evaluation in Counseling and Development*, 34(3):130-145.
9. Robakowska M, Tyranska-Fobke A, Walkiewicz M, et al (2018). Adaptive and maladaptive perfectionism, and professional burnout among medical laboratory scientists. *Med Pr*, 69(3):253-260.
10. Park HJ, Jeong DY (2016). Moderation effects of perfectionism and meaning in life on depression. *Personality and Individual Differences*, 98:25-29.
11. Childs J, Stoeber J (2012). Do you want me to be perfect? Two longitudinal studies on socially prescribed perfectionism, stress and burnout in the workplace. *Work and Stress*, 26:347-364.

12. Hill AP, Curran T (2016). Multidimensional perfectionism and burnout: A meta-analysis. *Personal Soc Psychol Rev*, 20(3):269-288.
13. Limburg K, Watson H, Hagger M, et al (2017). The relationship between perfectionism and psychopathology: A meta-analysis. *J Clin Psychol*, 73(10):1301-1326.
14. O'Connor RC, Rasmussen S, Hawton K (2010). Predicting depression, anxiety and self-harm in adolescents: The role of perfectionism and acute life stress. *Behav Res Ther*, 48(1): 52–59.
15. Levine SL, Green-Demers I, Werner KM, et al (2019). Perfectionism in adolescents: Self-critical perfectionism as a predictor of depressive symptoms across the school year. *Journal of Social and Clinical Psychology*, 38(1):70-86.
16. Kim LE, Chen L, MacCann C, et al (2015). Evidence for three factors of perfectionism: Perfectionistic Strivings, Order, and Perfectionistic Concerns. *Pers Individ Dif*, 84:16-22.
17. Sastre-Riba S, Perez-Albeniz A, Fonseca-Pedrero E (2016). Assessing perfectionism in children and adolescents: Psychometric properties of the Almost Perfect Scale Revised. *Learning and Individual Differences*, 49:386-392.
18. Zhang B, Cai T (2012). Using SEM to examine the dimensions of perfectionism and investigate the mediating role of self-esteem between perfectionism and depression in China. *Aust J Guid Couns*, 22(1):44-57.
19. Nakano K (2009). Perfectionism, self-efficacy, and depression: Preliminary analysis of the Japanese version of the Almost Perfect Scale-Revised. *Psychol Rep*, 104(3):896-908.
20. Öngen DE (2010). The relationships between adaptive and maladaptive perfectionism and aggression among Turkish adolescents. *Aust J Guid Couns*, 20(1):99-108.
21. Ashby JS, Kutchins CB, Rice KG (2008). Matches and mismatches: Partners, perfectionism, and premarital adjustment. *Journal of Counseling Psychology*, 55(1):125-132.
22. De Azevedo MH, Soares MJ, Bos SC, et al (2009). Perfectionism and sleep disturbance. *World J Biol Psychiatry*, 10(3):225-233.
23. Rice KG, Van Arsdale AC (2010). Perfectionism, perceived stress, drinking to cope, and alcohol-related problems among college students. *Journal of Counseling Psychology*, 57(4):439-450.
24. Black J, Reynolds WM (2013). Examining the relationship of perfectionism, depression, and optimism: Testing for mediation and moderation. *Personality and Individual Differences*, 54(3):426-431.
25. Klibert J, Lamis DA, Naufel K, et al (2015). Associations between perfectionism and generalized anxiety: Examining cognitive schemas and gender. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 33(2):160-178.
26. Schweitzer RD, Hamilton TK (2002). Perfectionism and mental health in Australian University students: Is there a relationship? *Journal of College Student Development*, 43(5):684-695.
27. Landa CE, Bybee JA (2007). Adaptive elements of aging: Self-image discrepancy, perfectionism, and eating problems. *Dev Psychol*, 43(1):83-93.
28. Chang EC (2000). Perfectionism as a predictor of positive and negative psychological outcomes: Examining a mediation model in younger and older adults. *Journal of Counseling Psychology*, 47(1):18-26.
29. Department of Human Services (2008). *Victorian Population Health Survey 2007*. Melbourne, Victoria: Department of Human Services.
30. Hooper D, Coughlan J, Mullen MR (2008). Structural equation modelling: Guidelines for determining model fit. *Electron J Bus Res Methods*, 6(1):53-60.
31. Childs J, Stoeber J (2010). Self-oriented, other-oriented, and socially prescribed perfectionism in employees: Relationships with burnout and engagement. *J Workplace Behav Health*, 25:269–281.
32. DiBartolo PM, Rendon MJ (2012). A critical examination of the construct of perfectionism and its relationship to mental health in Asian and African Americans using a cross-cultural framework. *Clin Psychol Rev*, 32(3):139-152.