

# Temperament and Character Inventory (TCI)

竹内美香, 吉野相英, 大野裕, 加藤元一郎, 北村俊則: Cloninger の 3 次元人格(TPQ)理論  
および日本語版 Tridimensional Personality Questionnaire (TPQ). 精神科診断学, 3;  
491-505, 1992.

Cloninger の 3 次元人格 tridimensional personality (TDP) 構造は, 不安障害患者や動物を用いた学習心理学的実験における抗不安薬の効果などの経験的事実から演繹された行動の触発・維持・抑制を含む 3 つの脳神経システムを仮定している。理論を構成する 3 つの次元は, 行動の触発 (新奇性追求), 維持 (報酬依存), 抑制 (損害回避) であり, 各々 dopamine, norepinephrine, serotonin の個体的代謝特性に支えられている。構造を測定するための自己記入式質問紙 Tridimensional Personality Questionnaire (TPQ) を日本語に翻訳し, 再英訳による確認作業の後, 日本の一般大学生 (450 名) に予備調査を行なった。その結果, 高い再テスト信頼性と内的整合性, 軽度精神症状および社会的望ましさ反応バイアスからの低い被影響性が見られ, 日本語版 TPQ の適用の可能性が保証された。

Takeuchi, M., Yoshino, A., Kato, M., Ono, Y. and Kitamura, T.: Reliability and validity  
of the Japanese version of the Tridimensional Personality Questionnaire among  
university students. *Comprehensive Psychiatry*, 34; 273-279, 1993.

The Tridimensional Personality Questionnaire (TPQ) is a self-rating questionnaire, based on a general biosocial theory, for the clinical description and classification of both normal and abnormal personality variants. It was translated into Japanese and administered with the General Health Questionnaire (GHQ) and the 10 item version of the Social Desirability Scale (SDS) to 450 university students on two occasions 2 months apart. Pearson Product-Moment Correlation Coefficients and k-coefficients between TPQ scale scores for the two occasions were significantly high, as were Cronbach's  $\alpha$ -coefficients of TPQ scales and subcategories at the first wave. Correlations between the TPQ scale score and GHQ and SDS scores were negligible. The TPQ thus appears to have test-retest reliability and content validity among a Japanese student population; it is uninfluenced by psychiatric morbidity or social desirability.

Yoshino, A., Kato, M., Takeuchi, M., Ono, Y. and Kitamura, T.: Examination of the  
tridimensional personality hypothesis of alcoholism using empirically multivariate  
typology. *Alcoholism: Clinical and Experimental Research*, 18; 1121-1124, 1994.

Cloninger (1987) has hypothesized tridimensional personality theory for two types of alcoholism, type 1 and type 2, that exhibit opposing clinical characteristics and personality traits. The Tridimensional Personality Questionnaire (TPQ) is designed to test this hypothesis on three independent dimensions—novelty seeking (NS), harm avoidance (HA), and reward dependence (RD)—to evaluate the personality trait. We examined the tridimensional personality

hypothesis by comparing TPQ scores between two empirically derived multivariate types of alcoholism. The present study included 191 male subjects with alcoholism. A cluster analysis was conducted using clinical characteristics, and two empirical types, type A and type B, were identified. Type A is similar to Cloninger's type 1 and type B is similar to type 2. The TPQ scores given to these two empirical types were compared. Scores on the NS and RD scales were in good agreement with the hypothesis, whereas the HA score was discordant with the hypothesis. HA is highly correlated with the depression scale score that is elevated in type B. We discussed the possibility that type B, which may be called a familial early-onset alcoholism, is related to character spectrum disorder.

木島伸彦, 斎藤令衣, 鈴木美香, 吉野相英, 大野裕, 加藤元一郎, 北村俊則: Cloninger の気質と性格の 7 因子モデルおよび日本語版 Temperament and Character Inventory (TCI). 精神科診断学, 7; 379-399, 1996.

Cloninger の気質と性格の 7 次元モデル seven-factor model of temperament and character は, パーソナリティの構成概念を気質と性格に分け, それぞれ 4 次元と 3 次元の下位次元を想定している。Cloninger の理念における気質とは, 遺伝性であり, 主として幼年期に顕われ, 認知記憶や習慣形成の際に前概念的のバイアスを伴うものである。気質の 4 次元は, (1) 行動の触発 (新奇性追求), (2) 維持 (報酬依存), (3) 抑制 (損害回避), (4) 固着 (固執) である。また, Cloninger の理論における性格とは, 自己概念について洞察学習することによって, 成人期に成熟し, 自己の或いは社会の有効性に影響するものである。性格の 3 次元は, 自己を同定する程度によって異なる, つまり (1) 自律的個人 (自己志向), (2) 人類社会の統合的部分 (協調), (3) 全体としての宇宙の統合的部分 (自己超越) である。この Cloninger の理念に基づくパーソナリティ構造を測定するための自己記入式質問紙 Temperament and Character Inventory (TCI) を日本語に翻訳し, 再英訳による確認作業の後, 日本人のサンプルを用いて日本語版 TCI の信頼性・妥当性検定を行なった。その結果, 高い内的整合性および, 構成概念妥当性が確認され, 軽度精神症状および, 社会的望ましき反応バイアスからの低い被影響がみられ, 日本語版 TCI の適用の可能性が保証された。

Tanaka, E., Kijima, N. and Kitamura, T.: Correlations between the Temperament and Character Inventory and the self-rating depression scale among Japanese students. Psychological Reports, 80; 251-254, 1997.

Kitamura, T., Kijima, N., Sakamoto, S., Tomoda, A., Suzuki, N. and Kazama, Y.: Correlates of problem drinking among young Japanese women: personality and early experiences. Comprehensive Psychiatry, 40(2); 108-114, 1999.

Problem drinking patterns were measured by the CAGE questionnaire among 90 currently drinking young Japanese women who were recently recruited by a Japanese company. problem drinking was examined in terms of personality (temperament and character as defined by Cloninger) and early life experiences (perceived parental behavior, parental abusive behavior, being bullied at school, and positive and negative life events experienced before the age of 16). Multiple regression analysis revealed that problem drinking could be predicted by a set of personality scores, early death of a close friend, and the interaction of the death of a close friend and low explorative excitability (nov-

elty-seeking component 1). This suggests that problem drinking in young women is partly determined by both personality and negative life events during childhood.

Kitamura, T., Kijima, N., Watanabe, K., Takezaki, Y., Tanaka, E. and Takehara, S.:  
Precedents of perceived social support: Personality and early life experiences.  
*Psychiatry and Clinical Neurosciences*, 53(6); 649-654, 1999.

In order to examine the effects of personality and early experiences on perceived social support, a total of 97 young Japanese women were investigated. Current interpersonal relationships were measured by an interview modified from Henderson *et al.*'s Interview Schedule for Social Interaction (ISSI). Personality was measured by Cloninger *et al.*'s Temperament and Character Inventory. Early life experiences at home and outside of home were also identified in the interview. The number of sources of perceived support was correlated with self-directedness, while satisfaction with perceived support was correlated with novelty seeking and with low harm avoidance. No early experiences --- early loss of a parent, perceived parenting, childhood abuse experiences, experiences of being bullied and/or other life events --- showed significant correlations with the number of satisfaction of supportive people. the quality and quantity of perception of social support differ in their link to personality, and perceived social support may, to some extent, be explainable in terms of personality.

Naito, M., Kijima, N. and Kitamura, T.: Temperament and Character Inventory (TCI) as predictors of depression among Japanese college students. *Journal of Clinical Psychology*, 56(12); 1579-1585, 2000.

Kijima, N., Tanaka, E., Suzuki, N., Higuchi, H. and Kitamura, T.: Reliability and validity of the Japanese version of the Temperament and Character Inventory. *Psychological Reports*, 86; 1050-1058, 2000.

The Temperament and Character Inventory was translated into Japanese, and to confirm the psychometric properties of the inventory, three samples were recruited from a nonpatient population. In nonpatient population A (N=555), the full version (240 items) of the inventory with dichotomous measuring, along with the General Health Questionnaire and the Social Desirability Scale, were distributed to the subjects. Factor analyses of the subscales showed that the factor structure of the inventory was consistent with Cloninger's theory. Correlations of the scale scores with the General Health Questionnaire and the Social Desirability Scale scores were almost negligible, indicating that the scale is resistant to the current psychopathology and response bias. In this and the other two university student samples (ns=395 and 377), Cronbach coefficients  $\alpha$  of the scale scores were substantially high except for the short version (125 items) of the inventory with dichotomous measures. The Japanese version of the inventory appears to have internal reliability and content and construct validity in a Japanese population.

Tomita, T., Aoyama, H., Kitamura, T., Sekiguchi, C., Murai, T. and Matsuda, T.: Factor

structure of psychobiological seven-factor model of personality: A model revision. *Personality and Individual Differences*, 29; 709-727, 2000.

The purpose of this study was to examine the factor structure in the Temperament and Character Inventory (TCI) and to determine appropriate subscales and items to assess the psychobiological seven-factor model with a nonclinical Japanese sample by the use of the TCI short version. Among 383 ex-members of the Japanese Antarctic Research Expedition, confirmatory factor analysis of the TCI showed that temperament consisted of four factor and character of three, as the original model suggested. Harm Avoidance, Reward Dependence, Self Transcendence and Cooperativeness may be interpreted as a constellation of interrelated but possibly discrete dimensions. Most of the items were loaded into each corresponding subscale, although a few of the items were not confirmed as appropriate. Implications and the future direction of personality research are discussed.

Kitamura, T., Tomoda, A., Kijima, N., Sakamoto, S., Tanaka, E., and Iwata, N.: Correlates of retrospective early life experience with personality in young Japanese women. *Psychological Reports*, 91; 263-274, 2002.

To examine the influence of early experiences on the development of personality, we used the Temperament and Character Inventory to assess 98 young women who had first entered a company. Different early experiences were linked, albeit weakly, to test scores. Both partial correlations and multiple regression analyses demonstrated that Self-directedness was higher if women reported higher care of parents. Partial correlation, but not multiple regression analyses, showed that Co-operativeness was higher if they reported higher care of parents and less frequent abuse. Early parental loss or negative or positive early life events showed no correlation with any of the Temperament and Character Inventory subscales.

松岡奈緒, 岸田泰子, 宇治雅代, 鹿井典子, 陳孜, 平村英寿, 北村俊則: アタッチメント・スタイルとパーソナリティ, 被養育体験, および性行動・性意識との関連に関する研究. 人間関係の希薄化がもたらした精神保健問題に関する研究. 平成 15 年度厚生労働科学研究補助金 (こころの健康科学研究事業) 総括・分担報告書, 4-12, 2004.

青年期におけるアタッチメント・スタイルとパーソナリティ, 被養育体験, および性行動・性意識との関係を調査するために, 全国 615 校の 4 年制大学に調査協力依頼をし, 110 大学へ調査票を配布した. 有効回答のうち 23 歳以下の未婚者を調査の対象とした.

アタッチメント・スタイルとパーソナリティ, 親の養育態度との関係を調査した結果, 女性においては, その父親と母親がともに豊かなケアを心がけることが安定したアタッチメント・スタイルを形成する要因となることが明らかとなった. また, 母親の過干渉は逆にアタッチメント・スタイルを不安定なものにしてしまうようであった.

父親の豊かなケアは娘の Reward Dependence (RD), Cooperativeness (C), Self-Transcendence (ST) に影響を及ぼし, その結果この 3 つの性質は secure なアタッチメント・スタイルを形成する要素となっていた. 一方, 母親の過干渉さは, 娘の Self-Directedness (SD) や C を低め, Harm Avoidance (HA) を高めていた. アタッチメントと Temperament and Character

Inventory (TCI) の関係をみると、高 SD, 高 C, 高 RD, 低 HA が secure なアタッチメント・スタイルを形成する要素となっていることから、母親の過干渉さが、娘のアタッチメント・スタイルを安定させる要素となりうる気質や性格に影響を及ぼし、その結果 insecure なアタッチメント・スタイルが形成されることが考えられた。次に、男性においては、父親の豊かなケアが安定したアタッチメント・スタイルを形成する要因となることが明らかになった。また、母親の過干渉さがアタッチメント・スタイルを不安定なものにしてしまう可能性が示唆された。また、男性の場合、高 RD, 高 SD, 高 C, 低 HA が安定したアタッチメント・スタイルを形成する要因となっているが、父親の過干渉が SD と C を低める方向に寄与していることから、父親の過干渉さは、直接アタッチメント・スタイルには影響しないものの息子の気質や性格に影響を及ぼし、ひいてはそれがアタッチメント・スタイルに影響することが予測できる。

アタッチメント・スタイルが影響を及ぼすと考えられる心理的適応の1つの表現として性意識・性行動においては、安定したアタッチメント・スタイルを持つ者は、青年期におけるアタッチメントの対象となりうる恋人との間で、より親密で安定した関係を継続できていた。

鹿井典子, 宇治雅代, 陳孜, 平村英寿, 松岡奈緒, 北村俊則: パーソナリティと養育環境に関する研究. 人間関係の希薄化がもたらした精神保健問題に関する研究. 平成 15 年度厚生労働科学研究補助金 (こころの健康科学研究事業) 総括・分担報告書, 36-41, 2004.

小学 5~6 年生から中学 1~3 年生までの男女 1350 名について、(1) 子どものパーソナリティと両親の養育態度との関連 (2) 子どものパーソナリティと両親のパーソナリティとの関連について、検証をおこなった。パーソナリティの測定には Temperament and Character Inventory (TCI) を使い、両親の養育態度は Parental Bonding Instrument (PBI) を使って測定した。子どもの TCI 各下位尺度を各々従属変数とし、両親の PBI ケア得点・過干渉得点を独立変数としてステップワイズ法を使った重回帰分析を行った。次に子どもの TCI 各下位尺度を従属変数、両親の TCI の下位尺度を独立変数としてステップワイズ法で重回帰分析を行った。結果からは子どものパーソナリティが父親、母親の PBI ケア得点と関連し、一部は母親の過干渉得点とも関連があることが明らかになった。特に母親の PBI ケア得点は子どものパーソナリティの気質、性格両方に影響していた。子どものパーソナリティと両親のパーソナリティの関係は子どもの TCI の気質部分のうち harm avoidance と、父親、母親両方の harm avoidance とが関連していた。10 歳から 16 歳を対象とした自己記入式尺度であるために評価に一定の限界はあるものと考えられる。結果から両親の養育態度は子どものパーソナリティ発達にとっての重要な予測因子となるであろうことが示唆された。

平村英寿, 宇治雅代, 鹿井典子, 陳孜, 松岡奈緒, 北村俊則: 児のパーソナリティおよび親のパーソナリティと養育態度についての研究. 人間関係の希薄化がもたらした精神保健問題に関する研究. 平成 15 年度厚生労働科学研究補助金 (こころの健康科学研究事業) 総括・分担報告書, 42-49, 2004.

児童の外向性問題行動と幼少期に受けた両親からの養育および児と両親双方の気質・性格との関係を調査するために、小学校 5 年生から中学校 3 年生を対象として県内の小中学校にアンケート調査への協力を依頼し、1549 家庭分の調査票を回収した。遺伝的に規定されているとされる両親の気質は児の外向性問題行動に影響を与えておらず、父親の自己志向性が高い、つまり自己責任と目的志向性が強く、臨機応変で自己受容ができる父親の子ほど攻撃的行動と非行的行動が低い

という結果がでた。また、遺伝的に規定されている新規性追求、つまり探究心が強く、衝動的で、無秩序な子供ほど攻撃的で、児の非行的行動は低い損害回避性と低い協調性、つまり不確実性に対する恐れが少なく、抑制が低く、社会的に不寛容・無関心で利己的な子供において多く見られた。両親の養育態度との関係から見れば父親が子供の自立と自律を尊重するような養育態度は攻撃性を下げるが、母親の養育態度は児の攻撃的行動と非行的行動に寄与していないという結果であった。

陳孜, 岸田泰子, 松岡奈緒, 宇治雅代, 鹿井典子, 平村英寿, 北村俊則: 思春期の危険な性行動を規定する心理社会的要因。人間関係の希薄化がもたらした精神保健問題に関する研究。平成 15 年度厚生労働科学研究補助金（こころの健康科学研究事業）総括・分担報告書, 60-66, 2004.

本論文は危険な性行動を規定する心理社会的要因について調査する為に、全国 110 大学へ調査票を発送し、2,258 有効回答の調査票を回収した。男女とも新奇性追求が高いほど危険な性行動をする傾向にあった。さらに、損害回避と持続の低い女性のほうが危険な性行動をする傾向にあった。男性は life events の下位項目 own disease の得点低いほど危険な性行動をする傾向にあった。男女とも attachment と, FACES-III と, PBI との関連を見られなかった。本調査の結果から、危険な性行動の規定要因としてパーソナリティ特に気質が関連していることが示唆された。

Kitamura, T. and Kishida, Y.: Early experiences and development of personality: A study of the Temperament and Character Inventory in 4000 university students in Japan. In (ed.) L. V. Kingler, Trends in Lifestyle and Health Research, pp. 1-20, Hauppauge: Nova Science Publishers, 2005.

The relationships of the personality traits measured by the Temperament and Character Inventory (TCI) and early experiences (early loss of a parent, perceived parenting, and early life events) were investigated in 4064 university students. Among the TCI scales, a series of multiple regression analyses showed that (1) contrary to our expectation, temperament as well as character dimensions could be predicted by the early experience variables; (2) much of character dimensions could be predicted by temperament dimensions; and (3) after controlling for temperament dimensions, character dimensions are predictable moderately by perceived parenting particularly among the female students; The fathers' and mothers' care scores predicted low Self-transcendence score of the female students while the fathers' overprotection scores predicted low Self-directedness in the female students. In the male students whose character subscales could be predicted by the early experiences as a whole, no substantial predictions of specific early experiences were made for any of the character dimensions. Despite the limitation of the study particularly the use of the shortened version of the TCI, this large-population study suggests that character domains develop based on the temperament styles under the parental influences.

Matsudaira, T. and Kitamura, T.: Personality traits as risk factors of depression and anxiety among Japanese students. Journal of Clinical Psychology, 62 (1); 97-109, 2006.

The aim of this study is to examine the effects of personality (temperament and character) on specific depression and specific anxiety. A total of 541 Japanese undergraduates were investigated using the Temperament and Character Inventory (TCI) and the Hospital Anxiety and Depression (HAD) Scale. Hierarchical multiple regression analyses revealed that specific depression was predicted by lower Reward-Dependence, Persistence, Self-Directedness, Co-operativeness, and Self-Transcendence; specific anxiety was predicted by higher Novelty-Seeking, Harm-Avoidance, Persistence, Self-Transcendence, and lower Self-Directedness. Immaturity of Self-Directedness is a risk factor for negative affectivity in general. Immaturity of all character dimensions is a risk factor for specific depression. The relationship between Harm-Avoidance and depression in previous studies may be linked partly to somatic symptoms that were deliberately eliminated in the HAD Scale.

Tanaka, N., Hasui, C., Uji, M., Hiramura, T., Chen, Z., Shikai, N., Kishida, Y. and Kitamura, T.: Correlates of the categories of adolescents' attachment style: personality, family function, perceived rearing, and early life events *Psychiatry and Clinical Neurosciences*, 62, 65-74, 2008.

Unmarried university students ( $N = 4226$ ) aged 18 to 23 years were examined to identify the psychosocial correlates of their current adult attachment styles. Four clusters of people – labelled indifferent, secure, fearful, and preoccupied – identified by cluster analysis were plotted two-dimensionally by discriminant function analysis with the first function (father's and mother's Care, Co-operativeness, and family Cohesion on the positive end while Harm Avoidance and father's and mother's Overprotection on the negative end) representing the Self-model and the second function (Reward Dependence and experience of Peer Victimization on the positive end while Self-directedness on the negative end) representing the Other model. These findings partially support Bartholomew's notion that adult attachment is based on the good vs. bad representations of the self and the other and that it is influenced by psychosocial environments experienced over the course of development.

Chen, Z., Tanaka, N., Uji, M., Hiramura, H., Shikai, N., Fujihara, S., and Kitamura, T.: The role of personality for marital adjustment of Japanese couples. *Social Behavior and Personality*, 35(4); 561-572, 2007.

To investigate the psychological and social correlates of risky sexual behavior (sexual relationship with multiple or irregular partners *and* little or no use of condoms), data from a large questionnaire survey ( $N = 4357$ ) were analyzed using the population of sexually active unmarried people aged 18 to 23 ( $n = 2258$ ). There was a gender difference in risk sexual behavior. Temperament domains, men's Novelty Seeking and women's Novelty Seeking and low Harm Avoidance, were associated with risky sexual behavior. No links were identified between risky sexual behaviors and either adult attachment style, family function, perceived rearing, or childhood life events. A structural equation model confirmed this finding. These results suggest that risky sexual behavior in adolescents was related to temperament personality traits.

Kitamura, T., Shikai, N., Uji, M., Hiramura, H., Tanaka, N., and Shono, S.: Intergenerational transmission of parenting style and personality: Direct influence or mediation? *Journal of Child and Family Studies*, 18; 541-556, 2009.

In order to examine the relationships between parenting styles and personality traits over generations, a cross-sectional questionnaire study was conducted for fathers and mothers of school-age children of grades 5 to 9. The parenting styles measured by the Parental Bonding Instrument (PBI) and the personality traits measured by the Temperament and Character Inventory (TCI) were correlated within and between the consecutive generations (the grandparents and the parents for the PBI and the parents and the children for the TCI). A series of structural equation modeling has shown that (1) while the parenting styles were transmitted directly from the grandparents to the parents, it was partly mediated by the fathers' Co-operativeness (C) but not so for the mothers, (2) while the personality traits were transmitted directly from the parents to the children, it was only the fathers' parenting styles that mediated C, and (3) the parents' parenting styles had independent effects upon the children's personality traits.

Tanaka, M., Kitamura, T., Chen, Z., Murakami, M., and Goto, Y.: Do parents rear their children as they were reared themselves? Intergenerational transmission of parental styles (warmth and control) and possible mediation by personality traits. *Open Family Studies Journal*, 2; 82-90, 2009.

Hiramura, H., Uji, M., Shikai, N., Chen, Z., Matsuoka, N. and Kitamura, T.: Understanding externalizing behavior from children's temperament and parental rearing. *Psychiatry Research*, 175; 142-147, 2010.

In order to investigate the extent to which parental rearing and the personality of the child contribute to the development of externalizing problems, a total of 946 Japanese children in the 5th to 9th grades and their parents were studied. The children's externalizing behavior, which consists of the aggression and delinquency subscales, was measured by the Child Behavior Checklist. Parental rearing was measured using the Parental Bonding Instrument. The children's personalities were measured using the junior version of the Temperament and Character Inventory. Aggressive children were higher in Novelty Seeking, and delinquent children were higher in Novelty Seeking and lower in Harm Avoidance. Both aggressive and delinquent children were characterised by paternal over-protection, and low maternal care.

Takeuchi, M., Miyaoka, H., Tomoda, A., Suzuki, M., Lu, X., and Kitamura, T.: Validity and reliability of the Japanese version of the temperament and character inventory: A study of university and college students, *Comprehensive Psychiatry*, 52; 109-117, 2011.

**Objective:** The Temperament and Character Inventory (TCI) is a widely used self-report measure of adult personality.

**Method:** We studied 586 Japanese university and college students with the 125-item version of the Japanese TCI.



**Results:** The factor structure of the TCI scales was similar to that reported in other languages. Depression was positively correlated with Novelty Seeking and Harm Avoidance (HA) but inversely correlated with Persistence, Self-directedness (SD), and Co-operativeness (C). Good Self-Image in the framework of adult attachment was positively correlated with SD but inversely with HA and Reward Dependence (RD). Good Other-Image in the framework of adult attachment was positively correlated with RD and C. The scores of the TCI scales were stable over a time span of 1.5 to 2 months. **Conclusion:** The Japanese version of the TCI may be a valid and reliable measure of temperament and character, at least among within adolescent and young adult population.

Chen, Z., Lu, X., and Kitamura, T.: The effects of temperament and character on symptoms of depression in a Chinese non-clinical population. *Depression Research and Treatment*, 2011; 198591, 2011.

**Objective** To examine the relations between personality traits and syndromes of depression in a non-clinical Chinese population. **Method** We recruited 469 non-clinical participants in China. They completed the Chinese version Temperament and Character Inventory (TCI) and Self-rating Depression Scale (SDS). A structural equation model was used to rate the relation between seven TCI scales and the three SDS subscale scores (based on Shafer's meta-analysis of the SDS items factor analyses). This was based on the assumption that the three depression subscales would be predicted by the temperament and character subscales whereas the character subscales would be predicted by the temperament subscales. **Results** The Positive Symptoms scores were predicted by low Self-directedness (SD), Co-operativeness (C), Reward Dependence (RD), and Persistence (P) as well as older age. The Negative Symptoms scores were predicted only by an older age. The Somatic Symptoms scores were predicted by *high* SD. **Conclusion** Syndromes of depression are differentially associated with temperament and character patterns. It was mainly the Positive Symptoms scores that were predicted by the TCI scores. The effects of Harm Avoidance (HA) on the Positive Symptoms scores could be mediated by low SD and C.

Lu, X., Chen, Z., Cui, X., Uji, M., Miyazaki, W., Oda, M., Nagata, T., Kitamura, T., and Katoh, T.: Effects of temperament and character profiles on state and trait depression and anxiety: A prospective study of a Japanese youth population. *Depression Research and Treatment*, 2012; 604684, 2012.

**Objective:** To examine the effects of temperament and character profiles on state and trait depression and anxiety in a Japanese youth population. **Method:** Japanese university students were solicited for participation in a two-wave study, with assessments performed at Time 1 (T1) and Time 2 (T2), separated by a five-month interval. A total of 184 students completed the Japanese version of the Temperament and Character Inventory (TCI) at T1 and the Hospital Anxiety and Depression Scale (HADS) at T1 and T2. We posited two latent variables, trait depression and anxiety, composed of the T1 and T2 HADS depression and anxiety scores, respectively. We also posited that temperament domain traits would predict character domain traits and that all the personality traits would be linked to trait depression and anxiety and also predict T2 depression and anxiety. **Results:** Structural regression modeling showed that (1)

only high Novelty Seeking predicted T2 Anxiety score, (2) trait depression and anxiety were linked to high Harm Avoidance and low Self-directedness, and (3) trait depression was linked to high Self-transcendence whereas trait anxiety was linked to low Reward Dependence, Persistence, and Co-operativeness. **Conclusion:** The characteristic associations between TCI subscales and depression and anxiety were limited to the trait rather than state aspects of depression and anxiety.

Chen, Z., Lu, X., and Kitamura, T.: The factor structure of the Chinese version of the Temperament and Character Inventory: Factorial robustness and association with age and gender. *Comprehensive Psychiatry*, 54; 292-300, 2013.

**Objective** To examine the factor structure of the Chinese 144-item version of the Temperament and Character Inventory (TCI) and its association with age and gender in a large non-clinical population. **Method** We recruited 1966 non-clinical participants in China. They completed the TCI Chinese version. They were randomly divided into two independent samples. One sample ( $n = 983$ ) was used for exploratory factor analysis (EFA), and the other ( $n = 983$ ) for confirmatory factor analysis (CFA). **Results** An EFA suggested a four-factor structure for temperament domains and a three-factor structure for character domains. This was confirmed by a CFA. Women showed significantly higher scores on HA, RD, C, and ST than men. Age affected every subscale; expect for RD. **Conclusion** The factor structure of the Chinese TCI was similar to the original factor-structure with some diversion reflecting the feature of recognition and culture of a Chinese population.

Minatani, M., Kita, S., Ohashi, Y., Kitamura, T., Haruna, H., Sakanashi, K., and Tanaka, T.: Temperament, character, and depressive symptoms during pregnancy: A study of a Japanese population. *Depression Research and Treatment*, 2013; Article ID 140169, 2013.

*Background.* To examine the effects of temperament and character domains on depression during pregnancy. *Methods.* We examined 601 pregnant women using a questionnaire that included the Edinburgh Postnatal Depression Scale (EPDS), the Temperament and Character Inventory (TCI), and demographic variables. *Results:* In a hierarchical regression analysis, severity of depression during pregnancy was predicted by the women's negative response towards the current pregnancy, low Self-directedness, and high Harm Avoidance, Persistence, and Self-transcendence. *Conclusion.* Depression during pregnancy is predicted by personality traits as well as women's negative attitudes towards the current pregnancy.