The present study examined the relationship between mindful parenting and parents' well-being and the mediating effect of self-compassion, affiliate stigma and parental stress, after controlling for child behaviour problems, parent's gender, income and education and child's IQ, among parents of children with autistic spectrum disorder (ASD). One hundred and forty two parents of children with ASD completed a self-report questionnaire. Two distinct components, namely self-warmth and self-coldness, were identified within self-compassion. Results showed that the effect of mindful parenting on well-being was fully mediated by self-coldness, affiliate stigma and parental stress. Furthermore, mindful parenting's association with parental stress was partially mediated by self-coldness and affiliate stigma. The present study shed light on the underlying factors through which mindful parenting promoted well-being. Implications and directions for future studies were discussed.