Process linking social support to mental health through a sense of coherence in Japanese university students

Takayoshi Kase [a,*], Shintaro Endo [b], Kazuo Oishi [c]

[a] Graduated School of Community and Human Services, Rikkyo University, Saitama, Japan
[b] Department of Integrated Science and Engineering for Sustainable Society, Chuo University, Tokyo, Japan
[c] Department of Community and Human Services, Rikkyo University, Saitama, Japan

ARTICLE INFO

ABSTRACT

This study aims to investigate the relationships among mental health, a "sense of coherence" (SOC), and social support in Japanese university students with a focus on gender differences. Participants (548 university students) completed General Health Questionnaire-12, of the SOC-13 scales, and of the social support scale. Structural equation modeling indicates indicate that improvement in social support may be effective in strengthening SOC as a precaution against the decline of mental health in university students. Additionally, it is suggested that enhancing support from friends in males and support from family members and special people in females is effective in strengthening SOC.

© 2016 Elsevier GmbH. All rights reserved.

1. Introduction

Recently, improvement of mental health of university students has become an important issue. According to the National Survey of College Counseling Center, 94% of the directors in college counseling centers reported that the number of university students with severe psychological problems (e.g., anxiety, clinical depression) has increased over the past 5 years (Gallagher & Taylor, 2014). In various countries and regions, many researches and approaches about mental health problems of university students have been conducted. For example, current states and perspectives (e.g., counseling or prevention programs) of problems about mental health in university students in Chile (Villacura et al., 2015), China (Yang, Lin, Zhu, & Liang, 2015), Germany (Kreß, Sperth, Hofmann, & Holm-Hadulla, 2015), Russia (Kulygina & Loginov, 2015), Turkey (Civitci, 2015), and the United States (Prince, 2015) have been reported in recently conducted studies. Similarly, the need to address mental health problems among Japanese university students has received particular attention (Abe, Inoue, & Oyama, 1999; Kunugimoto & Yamasaki, 2008; Shiraishi, 2005).

University students experience a high level of stress due to changes in their living environment (ex. change of residence, educational environment, friendships, etc.) and their undergoing the process of forming their self-identity and personality (Kreß

et al., 2015; Nishikawa & Sakamoto, 2005). For these reasons, they are likely to experience impaired mental health such as depressive symptoms (Sakamoto, 1997). Because such symptoms may relate to school maladaptation, preventing the aggravation of their mental health has become an important issue (Khawaja, Santos, Mojtaba Habibi, & Smith, 2013; Yajima, 2005). Additionally, it may be considered that university students usually experience a broader variety of stressors after graduating continuously (Sakamoto, Oikawa, Ito, & Nishikawa, 2010). Thus, it can be said that promoting ways of helping university students cope with stress is effective in the formation of self-identity and adaptation to social life.

In regard to the prevention and improvement of mental health problems, the salutogenic model (Antonovsky, 1987) has attracted much attention. This model focuses on factors that actively contribute to a healthy state and is characterized by its examination of these factors within value systems and worldviews based on life experiences. The factor that plays a central role in the salutogenic model is a "sense of coherence" (SOC). SOC is defined as the perception and sense of one's experiences in the world in which one is living as coherent, consistent, reasonable, and comprehensible (Yamazaki, 2008). Antonovsky (1987) indicated that individuals with strong SOC can effectively cope with stress. SOC is usually driven by an individual's desire to overcome challenges and tends to employ the coping strategy that is the most suitable response to the stressors that currently confront it (Monksnes, Espnes, & Haugan, 2013). In other words, individuals with strong SOC

maintain the sense that life has meaning even in stressful situations and can cope with stress flexibly. Some quantitative studies have reported a relationship between SOC and mental health. According to Knowlden, Sharma, Kanekar, and Atri (2012), SOC and resilience work well in improving mental health in university students. In Japan, Tsuno and Yamazaki (2012) revealed that Japanese adults with good mental health tended to have a high level of SOC. These studies suggest that strengthening SOC is likely to be an effective means for improving mental health in youth.

Social support is viewed as a factor that is related to both mental health and SOC. Lin (1986) defined social support as "perceived or actual instrumental and/or expressive provisions supplied by the community, social networks, and confiding partners." Social support can be classified into "social embeddedness," "enacted support," and "perceived support" (Barrera, 1986; Inaba, Ura, & Minami, 1987). Barrera (1986) provided an account of these three types of support as follows: social embeddedness means the connections that individuals have with significant others in their social environments. Enacted support refers to actions that others perform when they render assistance to a focal person. Perceived support is the cognitive appraisal of being reliably connected to others. Additionally, Barrera (1986) highlighted that these three types of social support have low relevance and are separate from each other. Among these types of support, perceived social support has received attention as a resource for coping with stress in a great deal of research (Barrera, 1986; Inaba et al., 1987). Perceived social support is a factor that improves mental health by indirectly and/or directly reducing stress (Cohen & Wills, 1985; Ura, 1992). According to Cassel (1976), it is more important to improve and strengthen social support than to reduce an individual's exposure to stressors. In a review article on social support, Cohen and Wills (1985) reported that perceived social support consistently reduced daily stress. In recent quantitative research, individuals with a high level of perceived social support had good mental health, and the lack of perceived support was shown to be a risk factor for mental health (Barth, Schneider, & von Kanel, 2010; Holden, Lee, Hockey, Ware, & Dobson, 2015).

Focusing on the relationship between social support and SOC, a study on social support and health by House, Landis, and Umberson (1988) suggested that the strengthening of SOC was one of the factors that mediate for the improvement of mental health by social support. Similarly, Antonovsky (1987) and Yamazaki (1999) stated that abundant human resources, such as social support, were a factor in strengthening SOC. According to the salutogenic model, SOC mobilizes human resources as a method of coping with stress (what is called generalized resistance resources in the salutogenic model), in addition to individual knowledge, skills, and material and economic affluence. Quantitative studies by Iwasaki and Igarashi (2011) and Kimura et al. (2001) revealed that university students with a higher level of perceived social support tended to have higher SOC. Based on these findings, the hypothesis can be generated that the perception of social support directly leads to an improvement in mental health and/or to the strengthening of SOC (Fig. 1). Provided that this hypothesis (Fig. 1) is accurate, it can be proposed that improving and strengthening social support (Cassel, 1976) is one of the primary means of addressing mental health problems in university students.

The effects of social support on mental health through SOC in Japanese university students have not been systematically studied. Some researchers reported gender differences in which females tended to perceive a higher level of social support than did males (e.g., Turner, 1994; Vaux, 1985). As the reason for these, Wada (1993) suggested that females tended to build closer interpersonal relationships than males. Additionally, Wada (1998) reported that there were some differences in stress-coping styles (males: coping with stress as much as possible on their own; females: coping with
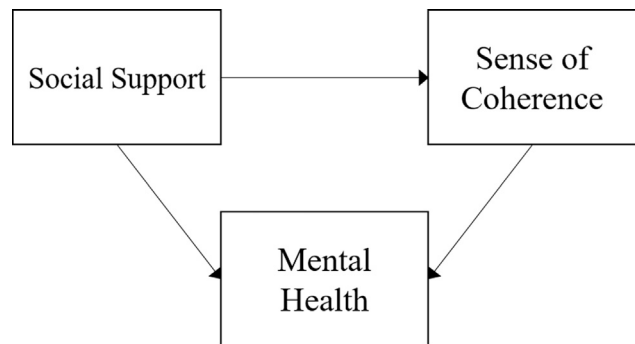

Fig. 1. Hypothetical model of mental health, sense of coherence, and social support.

stress using social support to a maximal degree) between males and females. From these suggestions, it might be necessary to take gender differences into account while investigating social support in detail. This study aims to investigate the relationships among mental health, SOC, and social support in Japanese university students with a focus on gender differences based on the hypothesis (Fig. 1).

2. Methods

2.1. Participants

Participants were 548 students (227 males, 321 females; mean age 20.0 ± 1.4; age range 18–37 years) from metropolitan universities, including seven different faculties. The survey was conducted after the purpose, the contents of questionnaire of the study were explained, and the participants provided their consent. The survey was anonymous so that they could not be identified.

2.2. Measures

2.2.1. Measurement of mental health

To measure the participants' level of mental health, the Japanese version of the General Health Questionnaire-12 (GHQ12) (Nakasugi & Daibo, 1985), which is a translation of the General Health Questionnaire developed by Goldberg (1972), was used. This scale comprised 12 items, and the participants are requested to mark their response to each item on a 4-point scale. The lower the total score, the higher the level of mental health. In this study, the GHQ12 was shown to have high reliability (males: Cronbach's $\alpha = .82$, females: $\alpha = .79$).

2.2.2. Measurement of SOC

To measure the level of SOC, a 29-item or 13-item short version of the Orientation to Life Questionnaire (Antonovsky, 1987) was used. This study employed the Japanese version of the SOC-13 scales (SOC-13), which was translated by Togari and Yamazaki (2005). This scale comprised 13 items, and participants were requested to mark their response to each item on a 7-point scale. The higher the total score, the stronger is the SOC, indicating that the subject has a higher capacity for coping with stress and maintaining good mental health. In this study, the SOC-13 was shown to have moderate reliability (male: $\alpha = .75$, females: $\alpha = .74$).

2.2.3. Measurement of social support

To measure social support, the Japanese version of the social support scale (social support scale) (Iwasa et al., 2007) was used, which is a translation of the Multidimensional Scale of Perceived