

Cross-Cultural Study on Social Support, Sense of Coherence and Outcomes in Pakistan and Germany

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Abstract

The current research examines the mediating role of sense of coherence between social support and outcomes including well-being and stress in collectivistic (Pakistan) and individualistic culture (Germany). Sample comprises of university students ($N = 200$) further equally divided in individualistic and collectivistic culture. Hierarchical regression is applied for data analysis. The hypotheses are confirmed by the findings. Sense of coherence partially mediated between social support and well-being in collectivistic culture, individualistic culture and overall sample. Similarly, sense of coherence partially mediated between social support and stress among students. The current investigation is an important addition in the literature on the theory of sense of coherence. The direct paths of sense of coherence and outcomes were well-established in the past literature; however, the present study contributes to the theory by suggesting an indirect path to well-being and stress.

Keywords: social support, sense of coherence, outcomes

1. Introduction

Sense of coherence is a theoretical construct which is important to explain the role of stress in the functioning of human being whenever a person encounters with a stressful life event and responses to these events. Sense of coherence not only plays important role for stressors but stress itself also play important role to set the level of sense of coherence in one's life (Paul, 2007). Concept of sense of coherence is introduced by Aaron Antonovsky (1979) and it explains why some people stay healthy and some become ill in stressful situations. Sense of coherence concept arose from the Salutogenic model (focus on origin of health rather than to find out causes of illness). According to Antonovsky (1987) strong sense of coherence is an important factor to reduce stress and it makes able to a person to think and believe that he or she can come across the demands of stressor (Kinman, 2008). Furthermore Antonovsky (1987) stated that this construct was

multidimensional concept it is defined by many researches such as Dumont and Provost (1999) stated that it include support received from family, friends or from stranger. According to Colarossi (2001) disaggregation and specification across structural and functional dimensions. In same way Farmer and Farmer (1996) stated that social support is a process that contributes the social cognitive and behavioural pattern. It also defined as a care, guidance or value provided by family, peers and community (Dollete et al., 2004). Social support not only directly effects stress but it also indirectly effects stress by creating sense of coherence. Antonovsky (1985) defined stressors as “a demand made by the internal or external environment of an organism that upsets its homeostasis, restoration which depends on a non-automatic and not-readily available energy-expending action” (p.72). Antonovsky proposed that “there are grounds for maintaining that the human organism is subject to constant psychosocial stressors by the very fact of having been born and survived” (Antonovsky, 1985, p. 83). Antonovsky (1985) realized that the nature of stressors is negative and people have usually unwelcoming and unhappy attitudes while facing these stressors.

Another important outcome of perceived social support is well-being. Social support both directly and indirectly effects well-being by creating sense of coherence. Positive psychologists explain well-being as an indicator of happiness, satisfaction with life, and positive feelings (Diener, 1984). A study by Wissing and Van Eeden (2002) reported that sense of coherence is a well-researched predictor of psychological well-being. Numerous studies confirmed that it functions as effective coping mechanism (Katalan, 2003; Madhoo, 1999; Otto, 2002). According to Antonovsky (1987) person who have strong well-being is also have strong and power full sense of coherence and its component including comprehensibility, manageability and meaningfulness also contribute to well-being of an individual. Past research indicates that the direct effect of social support on well-being and stress is well-established. Thus the current inquiry focused on the extension of the past research in which an indirect path is being investigated. Therefore this research is based on the mediating effect of sense of coherence between social support and its outcomes.

- **H₁** Sense of coherence mediates between social support and well-being among students.
- **H₂** Sense of coherence mediates between social support and stress among students.

3. Conceptual Framework

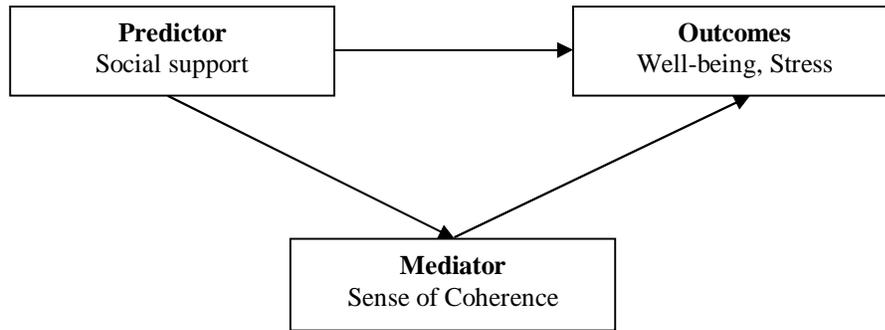


Figure 2: Mediating Role of Sense of Coherence between Social Support and Outcomes Including Well-Being and Stress

4. Methodology

4.1 Participants

Sampling is undertaken according to cross-sectional design of the survey method of research. Participants included university students ($N = 200$) from Germany as in individualistic culture ($n = 100$, 50%) and Pakistan as a collectivistic culture ($n = 100$, 50%). The underlying strategy for data collection was purposive sampling. Ethical issues are taken into consideration and informed consent was obtained before administering the scales. The sample size is selected by keeping in view the objectives of the study, accessibility to the participants, time and resources, and adequacy for conducting statistical tests for hypotheses testing.

4.2 Measures

Perceived Social Support Scale (Zimet et al., 1988) comprising of 12 items and 7-point rating scale, Sense of Coherence Scale (Antonovsky, 1987) comprising of 13 items and 7-point rating scale, Warwick Edinburg Mental Well-Being Scale (Warwick Edinburg Universities, 2006) comprising of 7 items and 5-point rating scale and stress subscale of Depression Anxiety Stress Scales (Lovibond & Lovibond, 2002) comprising of 7 items and 4-point rating scale were used to collect the data. The original reliability of these scales is .87, .92, .83 and .90 respectively. In the present study, the reliability of these scales was computed as .65, .86, .68 and .75 which indicate satisfactory internal consistency. PSS Scale (Kalsoom, 2014), WEMWB Scale (Qureshi, 2014) and DAS Scale (Riaz, Riaz, & Batool, 2014) were used in different researches in Pakistan. However, Sense of Coherence Scale was for the first time used in this research and thus the permission was obtained through email from the concerned person. Prior researches confirmed that all of these scales are constructed valid (Kalsoom, 2014; Qureshi, 2014; Riaz, Riaz, & Batool, 2014).

4.3 Procedure

Data was personally collected by the researchers in Pakistan however key referrals were contacted in order to collect the information from Germany. Data was collected from university students. Thus from both countries, permission for data collected was obtained

from the concerned authorities in the targeted universities. Data was collected during working hours and researcher paid thanks to students for their contribution.

4.4 Results

The underlying assumptions of the regression analysis were confirmed before conducting the mediation analysis. Linearity was ensured by computing the linear relationship among the study variables. Normality was confirmed by ensuring the symmetry and pointiness through less than 1 skewness and kurtosis values respectively. Multicollinearity is also not a serious issue. After ensuring these assumptions, the main analyses are carried out.

Table 1: Mediating Effect of Sense of Coherence between Social Support and Well-Being

Sr. No.	Predictors	Model 1			Model 2			ΔR^2	Sobel test
		b	β	R ²	b	β	R ²		
1	(constant)	14.79			10.72				1.45*
	Social support	.07	.28**	.076	.07	.25*			
	Sense of coherence				.07	.20*	.114	.038	
2	(constant)	12.14			6.12				2.55**
	Social support	.16	.46***	.213	.12	.35***			
	Sense of coherence				.13	.30***	.291	.079	
3	(constant)	13.68			8.20				2.72**
	Social support	.11	.37***	.135	.09	.30***			
	Sense of coherence				.11	.27***	.201	.067	
4	(constant)	28.43			31.97				-1.71*
	Social support	-.15	-.37***	.137	-.14	-.34***			
	Sense of coherence				-.07	-.13*	.153	.016	

* $p < .05$, ** $p < .01$, *** $p < .001$

(1) Collectivistic culture (n = 100), (2) individualistic culture (n = 100), and (3) overall sample and mediating role of sense of coherence between social support and stress in overall sample (n = 200)

(1) The ΔR^2 values of .038, with $F(1, 97) = 6.24$, $p < .01$ explains 3.8% variance as an added effect on well-being. The weights of regression are significantly reduced from .28 to .25 in the second model but the value of beta remains significant which depicts partial mediation of sense of coherence between social support and well-being in the collectivist culture. (2) The ΔR^2 values of .079, with $F(1, 98) = 19.94$, $p < .001$ explains 7.9% variance as an added effect on well-being. The weights of regression are significantly reduced from .46 to .35 in the second model but the value of beta remains significant which depicts partial mediation of sense of coherence between social support and well-being in the individualistic culture. (3) The ΔR^2 values of .067, with $F(1, 197) = 24.85$, p

< .001 explains 6.7% variance as an added effect on well-being. The weights of regression are significantly reduced from .37 to .30 in the second model but the value of beta remains significant which depicts partial mediation of sense of coherence between social support and well-being in the overall sample. (4) The ΔR^2 values of .016, with $F(1, 197) = 17.82$, $p < .001$ explains 1.6% variance as an added effect on well-being. The weights of regression are significantly reduced from -.37 to -.34 in the second model but the value of beta remains significant which depicts partial mediation of sense of coherence between social support and stress in the overall sample (Baron & Kenny, 1986).

5. Discussion

Current investigation examined the role of sense of coherence as mediator between social support and outcomes (well-being and stress). The underlying hypothetical assumptions were proved by the findings. Theory of sense of coherence proposed by Antonovsky (1987). Antonovsky (1997) illustrates that sense of coherence refers to an individual's ability to effectively cope with life stressors and the capability to raise the level of well-being. The current findings confirmed the theory under investigation. Findings confirmed the direct and indirect effect of sense of coherence on enhancing well-being and reducing stress. The theory studied in Pakistani context and contributes in a literature for collectivist culture on this theory because no such work has done so far in the Pakistani context. The study gives useful comparison of collectivistic culture i.e. Pakistan and individualistic culture i.e. Germany with respect the direct and indirect role of sense of coherence in well-being and stress. The direct path has been well-researched in the past research; however the current research focused on the indirect effect of sense of coherence which is an addition in the underlying theory.

Beside of direct effect of sense of coherence and social support there is also indirect effect of these two variables on well-being and stress. According to Antonovsky (1979) social support and sense of coherence are closely related to each other. Social support or social relationships have potential effect on three component of sense of coherence including comprehensibility, manageability and meaningfulness (Larsson & Kallenberg, 1996). According to Langheland and Wahl (2009) social support also had great impact on sense of coherence. In their longitudinal study, they revealed this thing that social support is an important resource in development of strong sense of coherence. Some studies show that senses of coherence not only act as an independent variable but also play a role of mediator (Hogh & Mikkelsen, 2005). Following study six and seventh hypothesis anticipated that "sense of coherence will mediate between social support and stress among students" and "sense of coherence will mediate between social support and well-being among students". These two hypotheses were supported in the present study.

Baron and Kenny (1986) explained that mediation analysis is used to measure the extent to which a mediator variable (sense of coherence) how much mediates the impact of an independent variable (social support) on a dependent variable (stress and well-being). Previous literature confirms the sense of coherence as a mediator and as an independent variable reduces the impact of stress and increase the person status of health (Kivimäki et al., 1998; Antonovsky, 1987). According to Hogh and Mikkelsen (2005) sense of coherence reduces the impact of stress and places a great mediation impact on well-being. According to all above discussion it is clear that social support is a superlative predictor of positive sense of coherence and sense of coherence is a mediator variable between

social support and its mental health related outcomes including well-being and stress. Present study helped to understand that social support or social networks of students must be increased to improve or built the sense of coherence among students. The prominent reason is that once the sense of coherence gets developed, it contributes towards mental health and well-being of a person (Antonovsky, 1979).

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