Psychometric Analysis of the Social Support Scale Among Indonesian Academicians

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Abstract: The current study investigates the psychometric characteristics of the Social Support Scale as an instrument for assessing social support for academics. The original version of the scale was adapted and translated into Indonesian and was administered to academics in Indonesia through a google form. The data were then analyzed to investigate the reliability, construct validity, and structure of factors of the instrument. Confirmatory factor analysis confirms that the three-dimension model was the best model regarding the internal structure. Our findings also advocate the Social Support Scale as a valid and reliable tool for assessing social support in Indonesian academics. Thus, it can be employed to examine lecturers' social support level which helps the universities to build a supportive working climate, as well as improve the relationship quality between employees.

Keywords: *Factor analysis, reliability, social support, validity.*

Introduction

Research consistently demonstrates that social support is beneficial for both mental and physical health, such as reducing psychological distress, promoting psychological adjustment, protecting against cognitive decline, and increasing the likelihood of longevity (Taylor, 2006). Social support is often recognized as an essential aspect that correlates with various outcomes in an employment context, such as burnout, job performance, engagement, and work satisfaction (Baruch-Feldman et al., 2002; Branscum et al., 2016; Foy et al., 2019; Orgambídez-Ramos & De Almeida, 2017; Velando-Soriano et al., 2020; Woodhead et al., 2016). Social support minimizes the negative consequences of stressful expectations, fosters higher-quality relationships, elicits good affective responses, and improves individual performance (Jolly et al., 2021).

Evidence suggests that social support has a pivotal association with employees' mental health. Social support acts as a mediator in the association between occupational stress and mental health (Chen et al., 2020), work-family balance and well-being (Leung et al., 2020), as well as moderating the effect of occupational stress on turnover intentions (Fong et al., 2018). Individuals possessing a high level of social support have better sleep quality and are not disturbed by work stress (Pow et al., 2017). It has been also reported that individuals who have a high level of organizational and social support experience lower anxiety than their counterparts (Labrague & De los Santos, 2020). Conversely, individuals with low social support encounter more severe anxiety symptoms (Olashore et al., 2021). Furthermore, social support is also known to affect one's self-esteem (Lestari & Fajar, 2020), engendering people to feel more optimistic about their future (Khasanah et al., 2020). Thus, not only it is beneficial for coping with stress (Ramania et al., 2019), social support is propitious for managing employees' dual role conflict (Widyasrini & Lestari, 2020).

The prevalence of stress experienced by teachers and workers in educational institutions is high (Riezebos & Huisman, 2021) as lecturers and researchers at universities are also professions that confront a lot of work stress. The lack of flexibility and freedom in workplace, issues regarding work security, trade-off between individual and professional development, and concern related to the acceptance of peer acknowledgement are known as the significant predictors of high stress among researchers (Opstrup & Pihl-Thingvad, 2016). Moreover, multiple jobs, institutional pressures, and a miscellaneous number of student needs induce considerable amount of stress among faculty workers. From the

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gender perspective, numerous studies indicate that female lecturers, regardless of their expertise field, experience more significant burdens in career development and stress than their male fellows (Russell & Weigold, 2020).

Ujir et al. (2020) reported that academic staff at Malaysian state institutions are responsible for teaching, supervising and giving consultation to students, researching and publishing scientific articles, arranging administrative matters, participating in community service, and professional development. Similar with their Malaysian colleagues, Indonesian lecturers must comply with the *Tri Dharma Perguruan Tinggi* (the three tasks of higher education), which consists of teaching, researching, as well as participating in community service.

To accomplish their duties, lecturers should interact and collaborate with numerous parties with various background. The presence of others facilitates the adaptation process to stressful circumstances, particularly against the change in physical and psychological health that may occur in response to stress (Taylor, 2006). The existence of other people in interpersonal relationships can be a material and psychological resource for people, known as social support.

Literature Review

Cobb (1976) defined the social support as the individual belief that people are loved, respected and cared for, where they share mutual obligations with their community. While according to Cohen (2004), social support is the psychological and material resources provided by social networks that improves individuals' capacity to cope with stress. Social support is, therefore, a function and result of social relations (Wachter et al., 2018; Williams et al., 2004). The closest individuals, such as family members, friends, co-workers, and neighbors, typically provide or receive social support.

Social support taxonomies usually classify forms of support into four categories: emotional, instrumental/tangible, informational, and appraisal (Berkman et al., 2000; Goldsmith, 2004; Taylor, 2006; Wachter et al., 2018). Ones can bestow emotional support by expressing care, concern, warmth, and affection to others or by convincing people that they are valuable to those who are compassionate toward them. This emotional support may strengthen their psychological state. Meanwhile, instrumental support can be perceived when someone receives physical aids such as commodities, services, and financial resources. Moreover, accompanying a friend to a doctor visit and providing food for a grieving family are also forms of instrumental support. Furthermore, informational support can be given by providing guidance, explanations, or access to sources of information to help a person comprehend his stress, as well as identifying the possible resources and necessary skills to manage it. Lastly, appraisal support can be defined as giving someone considerations that are more than just informative suggestions in the form of points of view, feedback, or evaluations that lead to problem-solving.

Jolly et al. (2021) state that four kinds of theoretical frameworks are widely discussed for investigating social support conducted in an occupational context. One of which is the conservation of resources (CoR) theory. The perspective of CoR theory explains that people attempt to gain, preserve and defend their valuable things, such as the resources they have (Hobfoll, 1989; Hobfoll & Ford, 2007; Holmgreen et al., 2017). It includes objects, personal characteristics, conditions, energies, and other resources that are classified into several categories, where social support is categorized as an external and secondary resource (Hobfoll & Ford, 2007; Holmgreen et al., 2017). Social support resource theory is a sub-theory of CoR, explaining that social and personal resources are interrelated with the environment, where both resources may affect environment and vice versa (Hobfoll et al., 1990). According to this theory, people will try to preserve social support to satisfy their need of conserving specific resources. Social support is also one of the essential parts of relationships besides conflict and control (House et al., 1988). Supportive relationships are needed to keep people to stay healthy and adaptive to stress.

The structural approach highlights the number of relationships individuals have, the frequency of contact with their connections, the solidity, as well as the interconnection of network members. While the functional approach emphasizes the function of support (emotional, instrumental, informational) and often coping with specific stressors.

Therefore, supportive supervision is considered as a resource that minimizes the perceived role pressures (Matthews et al., 2010). Social support from a supervisor and spouse can successfully mitigate the unfavorable effects of excessive work assertion, weariness, and work-family conflict (Pluut et al., 2018). The greater the social support obtained, the more resilient individuals will become and able to overcome adversity (Suryaratri et al., 2020). Some female caregivers could balance their home and work commitments with the help of workplace, family, and cultural norms. Tribal workplaces could be a valuable resource for women to balance their life and work by being sensitive to particular demands directed as disruptive (Christiansen et al., 2019). Whether given simultaneously or individually, social support from family, supervisors, and co-workers affects teachers' resilient self-efficacy (Santoso & Setiawan, 2018).

Social support was identified as the mediator in the correlation between marital status and mental health (Robinson et al., 2014). Partnered working mothers were known to have more excellent mental health than sole working mothers. Working mothers who perceive their workplace as being family-friendly reported having low levels of parental stress (Hwang, 2019). Contrarily, working mothers who regard their organizations as having low support for family matters tend to have significant levels of parenting stress when they do not utilize onsite daycare.

Academics need social support from various sources to lessen their work-family conflict. Social support also plays an important role in minimizing stress and conflict in both work and family (Ahmad et al., 2018). Mothers who are academics also naturally expect social support from their partners, families, managers, and colleagues. Both social support from workplace and non-work social networks are essential factors in managing dual role conflict (Bektaş, 2022). In a collectivistic context, female academics encountering work-family conflict receive assistance from their family members, in-laws, and the workplace through social support and time flexibility (Sadaf et al., 2022).

Social support is currently a concern in occupational stress studies (Alves et al., 2022; Karadaş & Duran, 2022; X. Li et al., 2022), work-life balance (Boakye et al., 2021; Inggamara et al., 2022; Köse et al., 2021), and work-family balance (Akanni & Ajila, 2021; Presti et al., 2022; Yucel, 2021). In educational context, researchers also highlight the relationship of social support with job stress (Johnson et al., 2021; Tehreem et al., 2022; Winding et al., 2022), work-life balance (Huda et al., 2023; Rashid et al., 2022), work-family balance (Pattusamy & Jacob, 2017), and work-family conflict (Akram & Ch, 2020; Achour et al., 2017; Bektaş, 2022; Sarwar & Sarfraz, 2016). However, such studies have been hampered by the extensive variety of social support scales utilized and the lack of reported psychometric evaluations of the administered scales. Reporting psychometric properties of scales and instruments is an important part in research (Streiner & Kottner, 2014) to ensure the acquired conclusions are accountable.

Jolly et al. (2021) on their review study revealed that the Social Support Scale formulated by Caplan and his colleagues is one of the most popular tools for evaluating social support in the workplace. This scale fairly accounts both structural and functional approaches. However, its report of psychometric evaluation is still limited. Existing evaluation of the scale's psychometric properties have shown inconsistent results (Ho & Chan, 2017; Kumar et al., 2020). This study was conducted to analyze the Social Support Scale's psychometric properties when is adapted to Indonesian and administered to academicians in Indonesia.

Methodology

Participants

A total of 202 academicians, 23.8% male and 76.2% female, participated in this study. The average age of participants was 41.78 years (*SD* = 8.89), ranged from 28 to 68 years.

Table 1. Participant Characteristics of Indonesian Academicians

Characteristics	Mean ± SD / Frequency (%)	
Age	41.78 ± 8.89	
Gender		
Male	48	(23.8)
Female	154	(76.2)
Education		
Master	156	(77.2)
Doctoral	46	(22.8)
Years of Service		
< 10 years	123	(60.9)
10 – 20 years	37	(18.3)
> 20 years	42	(20.8)
Marital Status		
Married	197	(97.5)
Divorce	1	(0.5)
Widow	4	(2.0)
Institutional Status		
Public	95	(47.0)
Private	107	(53.0)

Measures

Social Support Scale (SSS)

The Social Support Scale is a-12 items questionnaire designed to evaluate perceived support by individuals for coping with stress, problems, and demanding situations related to life and work. Each question is scored on a 7 Likert scale with a possible total score of 12 to 84. The scale was initially designed by Caplan and his colleagues with three dimensions and four items for each dimension (Ho & Chan, 2017; Jolly et al., 2021; Kumar et al., 2020).

Work-Family Balance (WFB) Scale

This scale adapts the Work-Family Balance Scale constructed by Lin and Xu (2020) based on four aspects of Frone's work-family balance: workplace-based conflict and facilitation against family interests, as well as family-based conflict and facilitation against job interests. WFB scale consists of 18 items and was administered to examine work-family balance.

Procedure

Two translators translated the social support and WFB scale. One was a lecturer in English literature, and the other was a psychology lecturer who is proficient in English and has experience living in an English-speaking country. The translation process is carried out in one direction only without a back translator (Peters & Passchier, 2006). The translation results are checked by five raters, focusing on the suitability of the sentences used with the original instruments and their readability for the Indonesian cultural context. Furthermore, five raters determine whether the item fits the construct to be measured. Instruments are sent to participants via social media networks in a google form. The questionnaire began by explaining the study's objectives. The respondents also received an explanation that the data obtained would only be used for scientific purposes and their confidentiality is maintained by anonymizing the respondents' identities.

Statistical Analysis

SPSS 23.0 for Windows and AMOS were used as statistical tools to analyze data. Descriptive statistics including mean, standard deviation, skewness, and kurtosis values, was calculated to analyze demographics and items of the scale. Cronbach's alpha assessed the scale's internal consistency before conducting factor analysis. While McDonald's omega was computed using Omega macro Hayes and Coutts (2020) to evaluate the reliability of the whole scale and its factors.

The values of Bartlett's test, Kaiser-Meyer-Olkin (KMO), and communality were applied to evaluate the sample suitability for the factor analysis. Confirmatory factor analysis (CFA) using Maximum likelihood extraction was applied to examine the 3-Factor model of the Social Support Scale. The model was evaluated by CMIN/DF and several indices, including Incremental Fit Index (IFI), Tucker Lewis Index (TLI), Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR). A value of CMIN/DF under three was considered acceptable (Collier, 2020). The value of CFI, TLI, and IFI above .95 denoted a good fit, while above .90 was considered acceptable (Collier, 2020; Hu & Bentler, 1999). A model with RMSEA below .05 denoted a good fit, with .08 and below indicating adequate; less than 0.1 was considered mediocre, and greater than .1 was unacceptable (Collier, 2020; Khine & Afari, 2014). A good model fit is present if SRMR is under .05, while a value of .05 to .09 is considered adequate (Collier, 2020). The values of composite reliability, both convergent and discriminant validity were also counted.

Findings / Results

Descriptive Statistics

Boxplot test detected an outlier from data of the Social Support Scale scores; therefore, it was excluded from data analysis. The Kolmogorov-Smirnov test examined the distribution of 201 remaining data. It suggested that the data were normally distributed (KS = .043, *p* > .05). Table 2 summarizes the descriptive analysis of the Social Support Scale items. The mean scores ranged from 4.42 to 6.43. The standard deviation (SD) scores ranged from 0.798 to 1.669, indicating that item scores were well spread around the mean. Almost all the Social Support Scale items showed a skewness absolute value of less than three and a kurtosis absolute value of less than 8. As Kline (2016) recommended, it indicates that the distribution of item scores did not violate univariate normality.

Table 2. Descriptive Statistics of the Social Support Scale (SSS)in Indonesian Academicians

	Mean	SD	Min	Max	Skewness	Kurtosis
SSS total	65.49	9.892	38.00	84.00	-0.229	-0.361
Sup-1	4.74	1.505	1.00	7.00	-0.458	-0.431
Sup-2	4.96	1.536	1.00	7.00	-0.543	-0.347
Sup-3	4.85	1.526	1.00	7.00	-0.633	-0.080
Sup-4	4.42	1.669	1.00	7.00	-0.333	-0.612
Cow-1	5.46	1.204	1.00	7.00	-0.751	0.048
Cow-2	5.34	1.398	1.00	7.00	-1.076	0.847
Cow-3	5.38	1.276	1.00	7.00	-0.706	-0.071
Cow-4	5.09	1.353	1.00	7.00	-0.457	-0.431
Fam-1	6.38	0.798	1.00	7.00	-1.278	1.186
Fam-2	6.33	0.885	1.00	7.00	-1.450	1.905
Fam-3	6.11	1.053	1.00	7.00	-1.208	1.060
Fam-4	6.43	0.785	1.00	7.00	-1.545	2.589

Exploratory Factor Analysis

The internal consistency of the Social Support Scale was investigated by using Cronbach's alpha test before conducting a factor analysis. The coefficient for the whole scale was .871, which is a desirable value. The correlations of the item to the corrected-item total ranged from .319 to .667, expressing the good coherence of the Social Support Scale.
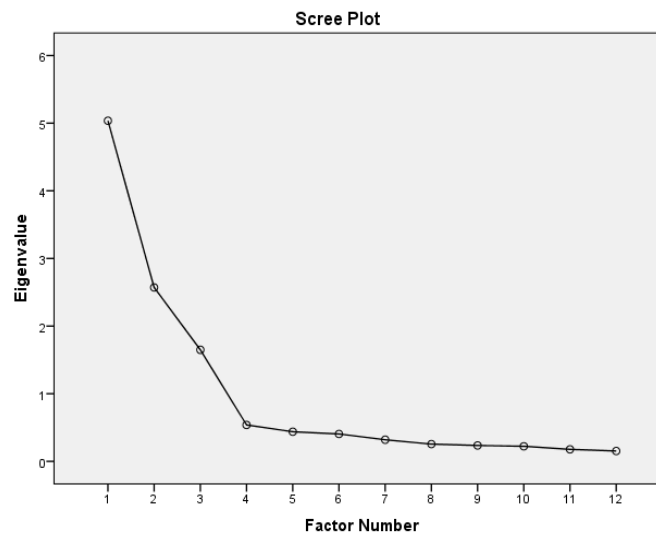

Figure 1. Scree Plot

Principal axis factoring extraction method and varimax rotation method for factor analysis was applied to examine the validity of the Social Support Scale when translated into Indonesian language (*Bahasa Indonesia)* and applied to Indonesian academicians. The factor was extracted to a fixed number of three. The KMO value was .838, implying that the degree of shared variance among the Social Support Scale item scores was meritorious (Field, 2018; Hair et al., 2019). Bartlett's test yielded an acceptable result (χ^2 = 1629.559, df = 66, *p* < .001), suggesting that the data fit factor analysis.

Table 3. Rotated Component Matrix and Communalities

Items	Factor Loading			Communalities
	1	2	3	
Factor 1: Supervisor (39.50%)				
Sup-1	**.78**	.13	.15	.65
Sup-2	**.86**	.10	.17	.78
Sup-3	**.84**	.05	.24	.77
Sup-4	**.77**	.01	.32	.70
Range= 4 – 28; M= 18.97; SD= 5.52				
Factor 3: Co-worker (11.35%)				
Cow-1	.29	.15	**.69**	.59
Cow-2	.21	.11	**.82**	.73
Cow-3	.17	.14	**.86**	.79
Cow-4	.20	.11	**.74**	.60
Range= 7 – 28; M= 21.27; SD= 4.54				
Factor 2: Family (19.03%)				
Fam-1	.04	**.69**	.24	.53
Fam-2	.08	**.90**	.10	.83
Fam-3	.07	**.80**	.01	.65
Fam-4	.09	**.85**	.15	.77
Range= 14 – 28; M= 25.25; SD= 3.06				

% In parentheses is the quantity of variance explained by each factor. M is the mean value of the factor, SD standard deviation

Three factors were considered appropriate, as indicated by the eigenvalues (1.649) greater than one and the scree plot inspection (see Figure 1). The three factors explained 69.88% of the total variance. The results (see Table 3) showed that all items were appropriately loaded in a defining factor with factor loading from .69 to .90. Hair et al. (2019) suggested that when the sample size is 200, the communalities lower than .4 are considered inappropriate. This study found that all items had communalities greater than .5. All 12 items of the Social Support Scale were ready for further analysis.
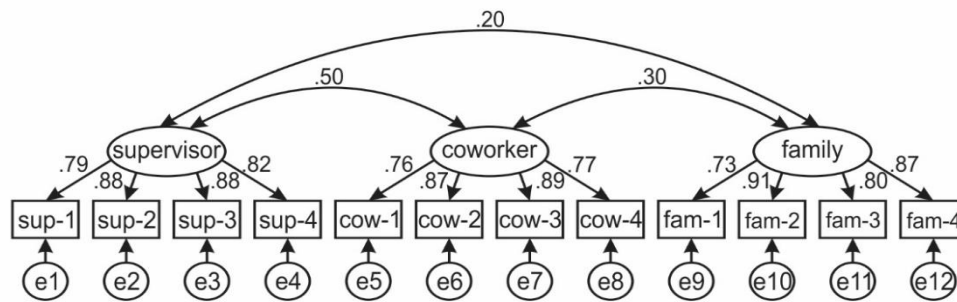
Figure 2. Measurement Model of the Social Support Scale in Indonesian Academicians

Confirmatory Factor Analysis

Confirmatory analysis (CFA) using maximum likelihood extraction was performed to verify that the scale was constructed through exploratory factor analysis (EFA). Figure 2 presents the measurement model of the Social Support Scale with 12 items. The CFA results showed that the posited model met the criteria for acceptable fit, as presented in Table 4.

Table 4. Model Fit Index of the Social Support Scale (SSS) in Indonesian Academicians

χ^2	df	p	χ^2/df	IFI	TLI	CFI	RMSEA	SRMR
121.468	51	.000	2.382	.956	.943	.956	.083	.050
			Acceptable	Good	Acceptable	Good	Mediocre	Adequate

According to Hair et al. (2019), in a sample of 200 respondents, a factor loading of .4 is required for significance. Table 5 shows that factor loadings of items in the three dimensions of the scale were all above .70 and were statistically significant ($p < .001$). The values were considered practically significant to indicate a well-defined structure (Hair et al., 2019).

Reliability and Validity

McDonald's ω was used to assess the reliability of a multidimensional scale, as recommended by Hayes and Coutts (2020). Composite reliability (CR) was also calculated by the formula (1), as mentioned in Collier (2020), as well as Widhiarso and Ravand (2014). Table 5 presents the obtained reliability, which is all above .7.

$$CR = \frac{(\sum \lambda_i)^2}{(\sum \lambda_i)^2 + (\sum 1 - \lambda_i^2)} \ (1)$$

Table 5. Factor Loading, AVE, and Reliability of the SSS in Indonesian Academicians

Items	SSS	Factor-1 (Sup)	Factor-2 (Fam)	Factor-3 (Cow)
Sup-1		.794***		
Sup-2		.879***		
Sup-3		.884***		
Sup-4		.825***		
Cow-1				.757***
Cow-2				.867***
Cow-3				.885***
Cow-4				.772***
Fam-1			.726***	
Fam-2			.906***	
Fam-3			.799***	
Fam-4			.866***	
AVE		.716	.684	.676
CR		.910	.896	.893
McDonald's ω	.880	.909	.894	.893

***$p < .001$

The average variance extracted (AVE) was computed by adding the squared multiple correlations (or squared factor loading) together and divided by the total number of indicators (Collier, 2020). The value of AVE should be above .5 to denote the convergent validity of the construct (Collier, 2020; Hair et al., 2019). This study found that the AVE of the three factors had a value greater than .5, which means they had adequate convergent validity.

Discriminant validity explains how a construct is dissimilar from the others. The rigorous way to evaluate discriminant validity is to compare the square roots of AVE values for any two constructs with the correlation estimate between them (Collier, 2020; Hair et al., 2019). The correlation estimates between factors of the Social Support Scale is presented in Table 6. This study found that the AVE values of each factor were more outstanding than their shared variance, indicating that the discriminant validity was supported.

Table 6. Correlations of the SSS within Scale and with WFB in Indonesian Academicians

	Supervisor	**Co-worker**	**Family**	**WFB**
SSS	.830**	.805**	.538**	.307**
Supervisor	**(.846)**	.467**	.184**	.220**
Co-worker		**(.822)**	.275**	.144*
Family			**(.827)**	.381**

*p < .05; **p < .01 - The bold elements in the main diagonal are the √AVE.

The evidence of criterion validity was evaluated using the Pearson correlation between the Social Support Scale and other measurements. Table 6 shows the correlation estimates between the Social Support Scale and its dimensions with other scales. On the scale level, a positive correlation with WFB was obtained. On the dimension level, a positive and moderate correlation with WFB was observed on the family dimension, while a weak correlation was on the supervisor and co-worker dimensions.

Discussion

Excessive workload overload and all the work domains of lecturers in universities, primarily the research domain, are now getting unassailable (Slišković & Maslać Seršić, 2011). Bearing work stress for an extended period of time will reduce lecturers' job satisfaction in universities (Li, 2018). Moreover, work-related stress can also lead to emotional exhaustion (Han et al., 2020). Lecturers at the university find that social support has a significant role in helping them dealing with stress.

This study aims to investigate the usefulness of the Social Support Scale in the occupational context of Indonesian higher education lecturers. Internal consistency analysis was first carried out on the scale with the Cronbach internal consistency approach. The result shows a coefficient of .871 which means that each item on the scale can reflect social support. Exploratory factor analysis conducted by extracting three factors shows that the items clustered together on factors that matched the communality values, as well as the weights of the eligible factors. All items indicates possessing a strong relationship with the factors in the model, in contrast to the findings of Kumar et al. (2020), who found items that were not significant for each factor.

The CFA demonstrate that factor loadings of the items were almost identical to those in previous studies. Factor loadings of items in the supervisor dimension ranged from .794 to .884, similar to previous studies' findings ranging from .833 to .872 (Kumar et al., 2020) and .76 to .85 (Ho & Chan, 2017). Factor loadings of co-worker dimension items were between .757 to .885, comparable to previous studies' findings ranging from .803 to .912 (Kumar et al., 2020) and .68 to .83 (Ho & Chan, 2017). Factor loadings of family dimension items were between .726 to .906, close to previous studies' findings ranging from .852 to .892 (Kumar et al., 2020) and .80 to .89 (Ho & Chan, 2017). This resemblance implies that the items consistently reflect the corresponding factors across a diverse sample and indicate the reliability of the items.

Since the social support scale is multidimensional, its reliability was estimated using the Omega (ω) coefficient, which does not assume essential tau-equivalent. The reliability of the scale in both scale level and dimension level are fair, where the ω value of the entire scale was .880. Whilst the ω value of supervision, co-worker and family dimension were respectively .909, .893, and .894, denoting good reliability. These reliability values were also comparable to Cronbach's α reported in previous studies, which ranged from .875 to .905 with a sample of Indian school teachers (Kumar et al., 2020) and between .84 to .90 with a sample of Chinese school teachers (Ho & Chan, 2017). Additionally, the CR values were greater than the cut-off of .7 (i.e., .90 for the supervisor, .893 for the co-worker, and .896 for the family dimensions), confirming the reliability. In summary, the findings justified the good reliability of the whole scale and the three sub-scales for the sample of Indonesian lecturers.

Previous studies by Kumar et al. (2020) and Ho and Chan (2017) did not evaluate AVE values. This study revealed that AVE scores (i.e., .716, .676, .684 for supervision, co-worker, and family, consecutively) were appropriate to verify convergent validity, meaning the items in each dimension shared a high proportion of common variance. Likewise, the AVE values much greater than the shared variance between constructs (ranging from .034 to .218) demonstrate discriminant validity, indicating that each dimension is completely different. Additionally, it was revealed that each sub-scale positively correlated with two other sub-scales, which means the sample in this research could identify the three sources of social support. Thus, these validities and factor loadings support the construct validity to warrant the scale's accuracy in measuring social support.

The correlations of social support and its dimensions with other constructs provide evidence that the construction of the Social Support Scale is valid and reliable. This result is consistent with the research of Presti et al. (2022) that revealed the connection of WFB with supervisor, co-worker and family support. The finding is also in line with previous research in the educational context that there was a link between family support and work-family balance (Pattusamy & Jacob, 2017), as well as social support and work-life balance (Rashid et al., 2022). Previous research also found a correlation between social support and work-family conflict (Sarwar & Sarfraz, 2016), as well as supervisor support and work-family conflict (Achour et al., 2017).

The present study shows that the Social Support Scale has a robust psychometric quality to assess perceptions of social support. The 3-dimensional scale theoretical model shows a convincing fit regarding the internal structure. Evaluation of the measurement model shows that the fit scale on the first-level model is different from the research of Ho and Chan (2017), which shows the fit scale on the second-level model. This finding confirms that social support is a multidimensional construct. It can also be seen that the group of items shows a more vital structural perspective than the functional perspective. Thus, the ones who give support is more important than the form of support itself.

Conclusion

The current study demonstrates that the Indonesian adoption of the Social Support Scale was a valid and reliable tool for assessing social support among Indonesian academics. It also suggests that the Social Support Scale is a multidimensional measure, and its items are reliable to reflect the corresponding dimensions. The good values of the ω coefficient and composite reliability for the whole scale and the subscales explained the scale's internal consistency. The validity test shows that the Social Support Scale has good validity in three types of validity, i.e., convergence, discriminant, and criterion validity. Therefore, it can be used to measure social support in Indonesian academics. Altogether, the findings confirm the structural robustness of the Social Support Scale and underpin the applicability of the scale to assess social support on academics, as well as the importance of policies for developing a supportive environment in the educational workplace.

Recommendations

Future study is suggested to further validate the three factors model of scale in educational environments from different cultural contexts. The test of measurement invariance can be conducted to see the reason for the comparison between the group. It is also recommended to examine the applicability of the scale on a particular group in an educational context, such as administration staff, academics from specific faculty, or teachers from early, elementary, secondary, and special education.

Limitations

There are some limitations in this study that must be mentioned. As the primary objective of this investigation is to assess the social support scale, the findings are limited. The scale does not measure social support behavior concretely and still needs exploration using narrative or qualitative methods. Moreover, researchers have not identified other variables, such as private or public universities, nor the gender of participants in this study. Further research may consider the variables above to investigate the effect of university status and gender on social support.

Ethical Clearance

The Health Research Ethics Committee Faculty of Medicine at Universitas Muhammadiyah Surakarta has evaluated and approved this study. The ethical clearance letter number 3614/B.2KEPK-FKUMS/VI/2021

Authorship Contribution Statement

Lestari: Concept and design, data acquisition, data analysis and interpretation, drafting manuscript, critical revision, and final approval. Nurani: Concept and design, data acquisition, data analysis, writing conclusion. Hertinjung: Securing funding, admin, data acquisition and writing recommendation.

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Appendix

Table A1. Social Support Scale in Bahasa Indonesia

Factor		Items
Supervisor	Sup-1	Atasan saya banyak membantu untuk membuat hidup saya lebih mudah [My supervisor gives much help to make my life easier].
	Sup-2	Mudah bagi saya untuk membicarakan sesuatu hal dengan atasan saya [It is easy for me to talk about things with my supervisor].
	Sup-3	Atasan saya dapat diandalkan ketika saya menemui masalah dalam pekerjaan saya [My supervisor can be relied on when I have problems at work].
	Sup-4	Atasan saya bersedia mendengarkan masalah pribadi saya [My supervisor is willing to listen to my personal problems].
Co-workers	Cow-1	Rekan kerja saya banyak membantu untuk membuat hidup saya lebih mudah [My co-workers give much help to make my life easier].
	Cow-2	Mudah bagi saya untuk membicarakan sesuatu hal dengan rekan kerja saya [It is easy for me to talk about things with my co-workers].
	Cow-3	Rekan kerja saya dapat diandalkan ketika saya menemui masalah dalam pekerjaan [My co-workers can be relied on when I have problems at work].
	Cow-4	Rekan kerja saya bersedia mendengarkan masalah pribadi saya [My co-workers are willing to listen to my personal problems].
Family	Fam-1	Keluarga saya banyak membantu untuk membuat hidup saya lebih mudah [My family gives much help to make my life easier].
	Fam-2	Mudah bagi saya untuk membicarakan sesuatu hal dengan keluarga [It is easy for me to talk about things with my family].
	Fam-3	Keluarga saya dapat diandalkan ketika saya menemui masalah dalam pekerjaan [My family can be relied on when I have problems at work].
	Fam-4	Keluarga saya bersedia mendengarkan masalah pribadi saya [My family is willing to listen to my personal problems].