

Students' Entrepreneurial Intention Viewed From Subjective Norms And Hardiness In Vocational High Schools In Yogyakarta

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Abstract: Subjective norms and student hardiness are one of the factors associated with entrepreneurial intentions. This study aims to empirically examine the relationship between subjective norms and hardiness with entrepreneurial intentions in students at Muhammadiyah 3 Vocational High School in Yogyakarta. The population in this study were students of class XII with a total of 357 students. The sample in this study was 98 students consisting of 4 majors, namely: computer engineering and networking, machine engineering, motorcycle engineering, and pharmacy. The sampling technique was randomized using cluster random sampling technique. The method of data collection was the scale of entrepreneurial intention, subjective norm scale, and hardiness scale. Data analysis was done with multiple linear regression techniques. The results showed that 1) there was a significant relationship between subjective norms and hardiness simultaneously with entrepreneurial intentions indicated by significance values $p=.030$ ($p<.05$), 2) there was a significant relationship between subjective norms and entrepreneurial intentions with significance values $p=.019$ ($p<.05$) 3) there was a very significant relationship between hardiness and entrepreneurial intention with a significance level of $p=.005$ ($p<.01$). Subjective norms and hardiness contributed 7.1% to job insecurity, so the remaining 92.9% can be influenced by other variables.

Index Terms: hardiness, entrepreneurial intention, subjective norm, student, high school,

1. INTRODUCTION

Entrepreneurship plays an important role in economic growth by reducing economic extravagance and creating new jobs [1], [2]. In addition, some experts also argue that the main drivers of economic development are entrepreneurship [3], [4]. The benefits generated from entrepreneurship can contribute to economic development by improving quality of life, offering new jobs, promoting sector productivity, increasing economic growth, facilitating social mobility, and so on [5]. One of the first steps to starting an entrepreneur is to have an entrepreneurial intention. Entrepreneurial intentions represent the individual's commitment to starting a business [6]. In addition, the entrepreneurial intention is also seen as a variable that can influence the emergence of entrepreneurial behavior in the future [7]. Individuals with entrepreneurial intentions believe that they have the ability to succeed in starting a new business [2].

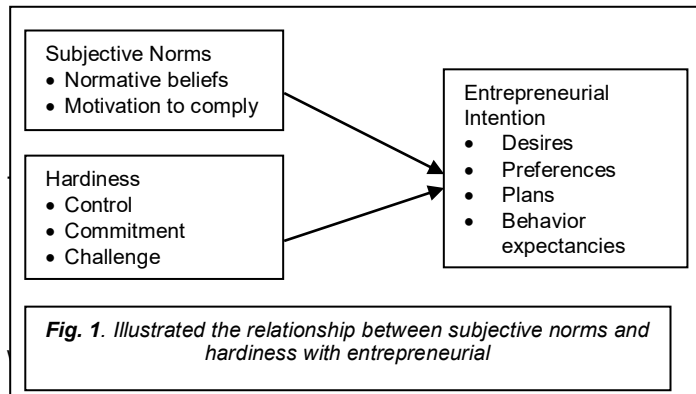
Entrepreneurial intention is a self-recognized belief that individuals intend to set up a new business and consciously plan to do so at some point in the future [8]. The willingness of individuals to carry out entrepreneurial behaviour, engage in entrepreneurial actions or build new businesses that tend to involve inner courage, ambition and feelings to stand on the tight competition of the workforce [9]. Intentional behaviour can help to understand the reasons for individuals planning to start a business before they seek opportunities [10]. The perceived desire for entrepreneurship as a career choice, perceived feasibility in starting and willingness to act [11].

Subjective norms have a direct positive impact on entrepreneurial intentions, and subjective norms can explain how much the individual intends to start a new business [12], [13]. Individuals will choose to become entrepreneurs when their role model and important figures choose entrepreneurial

careers, therefore entrepreneurial intentions can be predicted by subjective norms [14]. Furthermore, subjective norms can affect most individual decisions related to their intention to start a new business [15]. In addition, the individual's intention is very dependent on perceptions of family expectations and beliefs in entrepreneurial careers, in the context of individual entrepreneurship with stronger subjective norms that will have stronger entrepreneurial intentions [16], [17]. Subjective norms are an individual's understanding of the giving of support or not from other people to the actions they take [18]. Individual perceptions about whether other people agree or disagree with certain behaviors and their subsequent motivation to adhere to these perceived expectations [19]. Individual beliefs about how significant others want individuals to act in relation to certain behaviors by evaluating the results and values that individuals place on these normative beliefs [20]. The extent to which individuals assume that people who are important to him think they must or should not use a particular system or take certain actions [21]. Subjective norms are individual perceptions that most people are important to him, thinking he should or should not do certain behaviors [22]. A study has indicated that a very important factor in the making of entrepreneurial intentions and the success of business creation are hardiness and optimism [23]. Individuals with hardiness are more likely to have entrepreneurial intentions that will form an entrepreneurial mindset [24]. Creating and developing new businesses is full of environmental pressures, therefore to achieve entrepreneurial success, someone must have a high level of hardiness. Hardiness works as a psychic resource that can enhance individual entrepreneurial intentions to meet current emotional challenges [25]. Hardiness acts synergistically to build entrepreneurial intentions within individuals [26]. The concept of hardiness refers to a combination of self-control, commitment, and self-confidence in facing internal and external pressures [27]. A constellation of personality characteristics that makes individuals become motivated to be stronger, resistant, stable, and optimistic and to choose effective coping strategies in dealing with stressful environments and reduce the negative effects they face [28]. Hardiness is a personality variable in the form of feelings of commitment, a positive response to

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challenges, and a feeling of internal control that helps a person to deal with negative effects effectively [29]. Hardiness acts as a buffer for major life stressors related to endurance, health and good performance under a variety of stressful conditions and highly demanding situations [30], [31]. Based on the explanation above, the relationship between subjective norms and hardiness with entrepreneurial intentions can be illustrated in the chart below:



between subjective norms and hardiness with entrepreneurial intentions in students at Muhammadiyah 3 Vocational High School in Yogyakarta.

2 RESEARCH METHOD

2.1 Research Population and Sample

The population in this study were students of class XII with a total of 357 students at Muhammadiyah 3 Vocational High School in Yogyakarta. The sample in this study were 98 students consisting of 4 majors, namely: computer engineering and networking, machine engineering, motorcycle engineering, and pharmacy. The selection of research subjects was randomized using cluster random sampling technique.

2.2 Measuring Instrument

The method of data collection in this study uses a scale. The scaling model used is the Likert scaling model. The scale of entrepreneurial intention is arranged based on the dimensions of entrepreneurial intention according to Gelderen, Brand, Praag, Bodewes, Poutsma, and Gils [32], namely: desires, preferences, plans, and behavioral expectancies. An example of an item in the scale of entrepreneurial intention is "I feel I am ready for entrepreneurship", "I am interested in entrepreneurship", "I will be an entrepreneur based on the expertise that I have" and "I hope to have the opportunity to be an entrepreneur". The scale of subjective norms is based on the subjective norm component, according to Lam, Pine, and Baum [33], namely: normative belief and motivation to comply. An example of an item in the scale of entrepreneurial intention is "I am confident that by learning hard I will be successful" I have the ability to succeed in the future, "Father supports me to be an outstanding student" and "I feel, mother likes my learning activities at school". Hardiness scale is arranged based on hardiness components according to Kobasa, Maddi, and Kahn [34], namely: control, commitment, and challenge. An example of an item in hardiness scale is "I am involved in doing group assignments", "The criticism I get is a motivation to study harder" and "I work hard to get good grades".

2.3 Validity and Reliability of Measuring Instrument

The results of the trial analysis of 110 subjects on the scale of entrepreneurial intention obtained the results of the reliability coefficient (α) of .899 with the range of the corrected item-total correlation moving from .349 to .724. Valid and reliable items that are used for research are 16 items. The results of the trial analysis of 110 subjects on the subjective norm scale obtained the reliability coefficient (α) of .815 with the corrected item-total correlation range moving from .260 to .573. Valid and reliable items that are used for research are 20 items. The results of the trial analysis of 110 subjects on the hardiness scale obtained the results of the reliability coefficient (α) of .842 with the corrected item-total correlation index moving from .286 to .651. Valid and reliable items that are used for research are 18 items.

2.4 Data Analysis

The method for analyzing data uses parametric statistical methods. Data analysis was performed using the IBM SPSS 21 for windows program, through multiple regression techniques, namely a statistical analysis technique to determine the relationship between subjective norms and hardiness towards entrepreneurial intentions. Test assumptions carried out before hypothesis testing are normality test, linearity test, and multicollinearity test.

3 RESULT AND ANALYSIS

3.1 Prerequisite Test

3.1.1 Normality Test

The result of the normality test can be seen in table 1.

TABLE 1
NORMALITY TEST

Variable	K-SZ Score	Sig.	Explanation
Entrepreneurial Intention	1.343	.054	Normal
Subjective Norms	.781	.576	Normal
Hardiness	1.238	.093	Normal

Source: Reserch Result, 2019 (processed data)

Based on the results of the analysis of the normality test shown in table 1, it is known that the significance values of subjective norms, hardiness, and entrepreneurial intentions are .054, .576, and .093 which have $p > .05$, meaning that each data is normally distributed so that it can be concluded that each variable is normally distributed data.

3.1.2 Linearity Tes

The result of the linearity test can be seen in table 2.

TABLE 2
LINEARITY TEST

Variable	F Linearity	Sig.	Rule	Explanation
Subjective Norm	4.606	.035	$P < .05$	Linear
Hardiness	7.184	.009	$P < .05$	Linear

Source: Research Result, 2019 (processed data)

The results of the linearity test shown in table 2 obtained a significance level (p) of .035 and .009, ($P < .05$), which means linear or there is a line that connects subjective norms with entrepreneurial intentions and between hardiness and entrepreneurial intentions.

3.1.3 Multicollinearity Test

The result of multicollinearity test can be seen in table 3.

TABLE 3
MULTICOLLINEARITY TEST

Variable	Tolerance	VIF	Explanation
Subjective Norm	.569	1.757	No multicollinearity
Hardiness	.569	1.757	No multicollinearity

Source: Research Result, 2019 (processed data)

Based on table 3, it can be seen that subjective norms and hardiness have VIF values = 1.757 ($VIF < 10$) and tolerance .569 (tolerance $> .1$) so that there is no multicollinearity between subjective norms and hardiness.

3.1.4 Regression Analysis

The result of regression analysis can be seen in table 4.

TABLE 4
INTER VARIABLE EFFECT ANALYSIS RESULT

Variable	R	Sig	Rule	Annotation
Subjective Norms and Entrepreneurial Intention	.211	.019	$P < .05$	Very Significant relationship
Hardiness with Entrepreneurial Intention	.261	.005	$P < .01$	Very Significant relationship

Source: Research Result, 2019 (processed data)

Based on table 4, it can be seen that the relationship between subjective norms and entrepreneurial intentions is obtained by value = .211 with a significance level of $p = .019$ ($p < .05$) which means there is a significant positive relationship between subjective norms and entrepreneurial intentions. While the relationship between hardiness and entrepreneurial intentions obtained a value of $r = .261$ with a significance level of $p = .005$ ($p < .01$) which means that there is a very significant positive relationship between hardiness and entrepreneurial intentions.

TABLE 5
MULTIPLE REGRESSION ANALYSIS TEST RESULT

Variable	R	R Square	Sig.	Rule	Explanation
Subjective norms and hardiness with entrepreneurial intention	.071	.266	$P = .030$	$P < .05$	Very Significant relationship

Source: Research Result, 2019 (processed data)

Based on the results of the regression analysis, it was found that subjective norms and hardiness were simultaneously

related to students' entrepreneurial intentions at Muhammadiyah 3 Vocational High School in Yogyakarta. These results indicated that the first hypothesis was accepted so that the intention of entrepreneurship can be predicted based on subjective norms and hardiness. Together, the two independent variables contributed 11.26% to the entrepreneurial intention, so the remaining 89.74% could be influenced by other variables. Other factors that influence entrepreneurial intentions include the need for achievement and family business background [13]. In addition Ajzen [35] states in general, there are three factors that influence entrepreneurial intentions, namely social factors (gender, age, education, race, ethnicity, religion and income), personal factors (attitudes, personality, values, emotions and intelligence) and information factors (experience and knowledge). Peng, Lu, and Kang [36] added that one of the supporting factors in entrepreneurial intentions is psychological factors. Psychological factors in question are such as strong individual control, willingness to take risks, strong achievement orientation, endurance and intelligence. Partial contributions show subjective norms contributing 4.45% to entrepreneurial intentions and contributions to hardiness with entrepreneurial intentions of 6.81%. The results of this study are in accordance with previous studies by Tong, Tong and Loy [13]; Peng, Lu and Kang [36] which states that subjective norms and hardiness have an influence on entrepreneurial intentions. Based on the results of the analysis, it is partially indicated that the second hypothesis is accepted, which means there is a significant positive relationship between subjective norms with entrepreneurial intentions in students at Muhammadiyah 3 Vocational High School in Yogyakarta. Subjective norms are responsible for the making of individual entrepreneurial intentions, the values and beliefs embraced by important figures around individuals really affect personal preferences to have entrepreneurial intentions and entrepreneurial behaviour [37], [38]. The results of a study found that subjective norms seemed to influence entrepreneurial intentions, individuals with high entrepreneurial intentions mentioned that the expectations of the social environment, especially family members or close friends, greatly influenced his intention in entrepreneurship and supporting entrepreneurship as a career choice [39]. Subjective norms are a result of an individual's understanding of the beliefs of others [40]. When the closest environment, such as family and teachers, give confidence and trust to students and always encourage entrepreneurship, the intention of entrepreneurship will be stronger in students. Individuals who have confidence in other people's expectations of him will be a trigger to generate the desire for entrepreneurship and will strive diligently to achieve the target in entrepreneurship, and individuals who have an incentive in carrying out these beliefs will easily see opportunities in making plans to start a business. Furthermore, confidence can increase the desire for entrepreneurship [36]. The results of the subsequent analysis show that the third hypothesis is accepted, which means that there is a very significant relationship between hardiness and entrepreneurial intentions in students at Muhammadiyah 3 Vocational High School in Yogyakarta. Entrepreneurship is often seen as a more challenging profession with a higher level of resistance in it, so hardiness is needed to maintain individual entrepreneurial intentions [41]. Individuals with hardiness have a deep commitment to various areas of life such as entrepreneurship,

because they believe that they have control over what happens in their lives, so individuals tend to consider difficult situations in creating jobs as challenges that can be resolved, therefore hardiness is able to explain how some individuals are able to maintain their entrepreneurial intentions so that they are not affected by a stressful work environment [42]. The limitation in this study lies in the small number of samples, it is expected that in subsequent studies, increasing the number of samples and the study population. The next researcher is expected to add or use other variables besides human relations and works independence, so they can know the effect of other variables.

4 CONCLUSION

Based on the results of data analysis and discussion in this study, it can be concluded that there is a significant positive relationship between subjective norms and hardiness of Vocational students together (simultaneous) with entrepreneurial intentions, there is a significant positive relationship between subjective norms and entrepreneurial intentions, and there is a very significant positive relationship between hardiness towards entrepreneurial intentions. Simultaneously subjective norms and hardiness contributed 11.26% to entrepreneurial intentions. Partially subjective norms contribute 4.45% to entrepreneurial intentions and contributions to hardiness with entrepreneurial intentions of 6.81%. Hardiness has a more dominant contribution than the subjective norm.

ACKNOWLEDGMENT

The author would like to thank the Faculty of Psychology, Ahmad Dahlan University, Yogyakarta and the Psychology Masters Study Program for giving permission and support in conducting this research so that this research can be carried out and completed smoothly.

REFERENCES

- [1] K. Fellnhofner, and S. Kraus, "Examining Attitudes Towards Entrepreneurship Education: A Comparative Analysis Among Experts," *International Journal of Entrepreneurial Venturing*, vol. 7, no. 4, pp. 396-411, 2015.
- [2] H. Zhao, S.E. Seibert, and G.E. Hills, "The Mediating Role of Self-Efficacy in The Development of Entrepreneurial Intentions," *Journal of Applied Psychology*, vol. 90, no. 6, pp. 1265-1272, 2005.
- [3] M. Raposo, D. Smallbone, K. Balaton, and L. Hortoványi, *Entrepreneurship, Growth and Economic Development*. Northampton: Edward Elgar Publishing, 2011.
- [4] S.E. Sanyang, and W.C. Huang, "Entrepreneurship and Economic Development: The EMPRETEC Showcase," *International Entrepreneurship and Management Journal*, vol. 6, no. 3, pp. 317-329, 2010.
- [5] P.D. Reynolds, *Entrepreneurship in The United States: The Future is Now*. New York: Springer, 2007.
- [6] F.B. Zapkau, C. Schwens, H. Steinmetz, and R. Kabst, "Disentangling The Effect of Prior Entrepreneurial Exposure on Entrepreneurial Intention," *Journal of Business Research*, vol. 68, no. 3, pp. 639-653, 2015.
- [7] N.F. Krueger, M.D. Reilly, and A.L. Carsrud, "Competing Models of Entrepreneurial Intentions," *Journal of Business Venturing*, vol. 15, no. 5-6, pp. 411-432, 2000.
- [8] E.R. Thompson, "Individual Entrepreneurial Intent: Construct Clarification and Development of An

- Internationally Reliable Metric," *Entrepreneurship Theory and Practice*, vol. 33, no. 3, pp. 669-694, 2009.
- [9] Z.M. Zain, A.M. Akram., and E.K. Ghani, "Entrepreneurship Intentions Among Malaysian Business Students," *Canadian Social Science*, vol. 6, no. 3, pp. 34-44, 2010.
 - [10] J.H. Wang, L.P. Peng, and C. Liang, "Developing and Testing The Psychological Variable, Rural Practice, and Entrepreneurial Intentions Scales," *Review of Agricultural Extension Science*, vol. 31, pp. 72-95, 2014.
 - [11] G. Nabi, R. Holden, and A. Walmsley, "Graduate Career-Making and Business Start-Up: A Literature Review," *Education+ Training*, vol. 48, no. 5, pp. 373-385, 2006.
 - [12] C.J. Armitage, M. Conner, "Efficacy of The Theory of Planned Behavior: A Metaanalytic Review," *British Journal of Social Psychology*, vol. 40, no. 4, pp. 471-499, 2001.
 - [13] X.F. Tong, D.Y.K. Tong, and L.C. Loy, "Factors Influencing Entrepreneurial Intention Among University Students," *International Journal of Social Sciences and Humanity Studies*, vol. 3, no. 1, pp. 487-496, 2011.
 - [14] G.A. Alsos, E.J. Isaksen, and E. Softing, "Youth Enterprise Experience and Business Start-Up Intentions," *Nordic Conference on Small Business Research Stockholm*, pp. 1-5, 2006.
 - [15] F. Welter, D. Smallbone, N. Isakova, and E. Aculai, *The Role of Gender for Entrepreneurship in A Transition Context*. Cheltenham: Edward Elgar, 2007.
 - [16] E.J. Douglas, and D.A. Shepherd, "Self-Employment as A Career Choice: Attitudes, Entrepreneurial Intentions, and Utility Maximization," *Entrepreneurship Theory and Practice*, vol. 26, no. 3, pp. 81-90, 2002.
 - [17] V. Souitaris, S. Zerbinati, and A. Al-Laham, "Do Entrepreneurship Programmes Raise Entrepreneurial Intention of Science and Engineering Students? The Effect of Learning, Inspiration and Resources," *Journal of Business Venturing*, vol. 22, no. 4, pp. 566-591, 2007.
 - [18] R.A. Baron., and D.E. Byrne, *Social Psychology*, 10th edition. USE: Allyn & Bacon, 2002.
 - [19] K. Glanz, B.K. Rimer, and F.M. Lewis, *Health Behavior and Health Education*. San Francisco: Jossey-Bass, 2002.
 - [20] R. Pawlak, D. Brown, M.K. Meyer, C. Connell, K. Yadrick, J. T. Johnson., and A. Blackwell, "Theory Of Planned Behavior And Multivitamin Supplement Use in Caucasian College Females," *The Journal of Primary Prevention*, vol. 29, no. 1, pp. 57-71, 2008.
 - [21] V. Venkatesh, and H. Bala, "Technology Acceptance Model 3 and A Research Agenda on Interventions," *Decision Sciences*, vol. 39, no. 2, pp. 273-315, 2008.
 - [22] M. Fishbein, and I. Ajzen, *Predicting and Changing Behavior: The Reasoned Action Approach*. New York: Taylor & Francis, 2011.
 - [23] J.C. Ayala, and G. Manzano, "The Resilience of The Entrepreneur. Influence on The Success of The Business. A Longitudinal Analysis." *Journal of Economic Psychology*, vol. 42, pp. 126-135, 2014.
 - [24] R.F. Sinclair, "Creating An Entrepreneurial Frame of Mind." *Dissertations*, University of Louisville, Louisville, 2014.
 - [25] M. Csikszentmihalyi, "The Promise of Positive Psychology," *Psychology Topics*, vol. 18, no. 2, pp. 203-211, 2009.
 - [26] F. Luthans, and C. M. Youssef, "Human, Social, and Now Positive Psychological Capital Management:

- Investing in People for Competitive Advantage,” *Organizational Dynamics*, vol. 33, no. 2, pp. 143-160, 2004.
- [27] N.A. Pourafkari, *Comprehensive Dictionary of Psychology-Psychiatry and Related Issues*. Tehran: Farhang. 2006.
- [28] S.R. Maddi, *Hardiness: Turning Stressful Circumstances Into Resilient Growth*. New York: Springer Science & Business Media, 2012.
- [29] S. Taylor, L. Peplau, and D. Sears, *Social Psychology*. Englewood Cliffs: Prentice Hall, 2009.
- [30] P.T. Bartone, R.R. Roland, J.J. Pica, and T. J. Williams, “Psychological Hardiness Predicts Success in US Army Special Forces Candidates.” *International Journal of Selection and Assessment*, vol. 16, no. 1, pp. 78-81, 2008.
- [31] S.R. Maddi, R.H. Harvey, D.M. Lu, J.L. Khoshaba, M. Persico, and M. Brow, “The Personality Construct of Hardiness, III: Relationships with Repression, Innovativeness, Authoritarianism, and Performance.” *Journal of Personality*, vol. 74, no. 2, pp. 575-598, 2006.
- [32] M.V. Gelderen, M. Brand, M.V. Praag, W. Bodewes, E. Poutsma, and A.V. Gils, “Explaining Entrepreneurial Intention By Mens of The Theory of Planned Behaviour,” *Career Development International*, vol. 13, no. 6, pp. 538-559, 2008.
- [33] T. Lam, R. Pine, and T. Baum, “Subjective Norms Effects on Job Satisfaction,” *Annals of Tourism Research*, vol. 30, no. 1, pp. 160–177, 2003.
- [34] S.C. Kobasa, S.R. Maddi., and S. Kahn, “Hardiness and Health: A Prospective Study,” *Journal of Personality and Social Psychology*, vol. 42, no. 1, pp. 186-177, 1982.
- [35] E. Autio, R. Keeley, M. Klofsten, G. Parker, and M. Hay, “Entrepreneurial Intent Among Students in Scandinavia and in The USA,” *Enterprise and Innovation Management Studies*, vol. 2, no. 2, pp. 145-160, 2001.
- [36] A. Heuer, and F. Liñán, “Testing Alternative Measures of Subjective Norms in Entrepreneurial Intention Models,” *International Journal of Entrepreneurship and Small Business*, vol. 19, no. 1, pp. 35-50, 2013.
- [37] A.M. Hogg, M.G. Vaughan, *Introduction to Social Psychology*. Australia: National Library of Australia Pearson Education Australia, 2005.
- [38] Z. Lu, G. Peng, and H. Kang, “Entrepreneurial Intention and Its Influencing Factors: A Survey of The University Student in Xi’an China,” *Scientific Research*, vol. 3, pp. 95-100, 2013.
- [39] S.R. Maddi, “The Story of Hardiness: Twenty Years of Theorizing, Research, and Practice,” *Consulting Psychology Journal: Practice and Research*, vol. 54, no. 3, pp. 173-185, 2011.
- [40] A.M. Hogg, M.G. Vaughan., *Introduction to Social Psychology*. Australia: National Library of Australia Pearson Education Australia, 2005.
- [41] S.R. Maddi, “The Story of Hardiness: Twenty Years of Theorizing, Research, and Practice,” *Consulting Psychology Journal: Practice and Research*, vol. 54, no. 3, pp. 173-185, 2002.
- [42] K.J. Hleman., N.A. Bowling, and G.M. Alarcon, “A Meta-Analytic Examination of Hardiness.” *International Journal of Stress Management*, vol. 17, no. 4, pp. 277-307, 2010.