

## 5 CONCLUSION

Based on the data and results collected and obtained that are showed in the previous chapter, it can be concluded that:

1. Based on the demographic analysis, the majority of Daop 6 employees are males ranging from the age of 22-35 years old.
2. Based on the analysis on employees' subjective well-being, it can be concluded that in general, employees in Daop 6 are satisfied with their life which indicating they are in a good subjective well-being.
3. Based on the analysis on IWPQ, the task performance and contextual performance average score are higher than the counterproductive work behaviour. Since counterproductive work behaviour is harmful to the organization, it could be concluded that the result of IWPQ was good.
4. H1 is accepted. The result shows that employees' subjective well-being has a positive and significant influence on their performance. Meaning that the better the employees' subjective well-being, the better their performance are.
5. The weight of subjective well-being influence on work performance is 49,9%.

### 5.1 Research Limitation

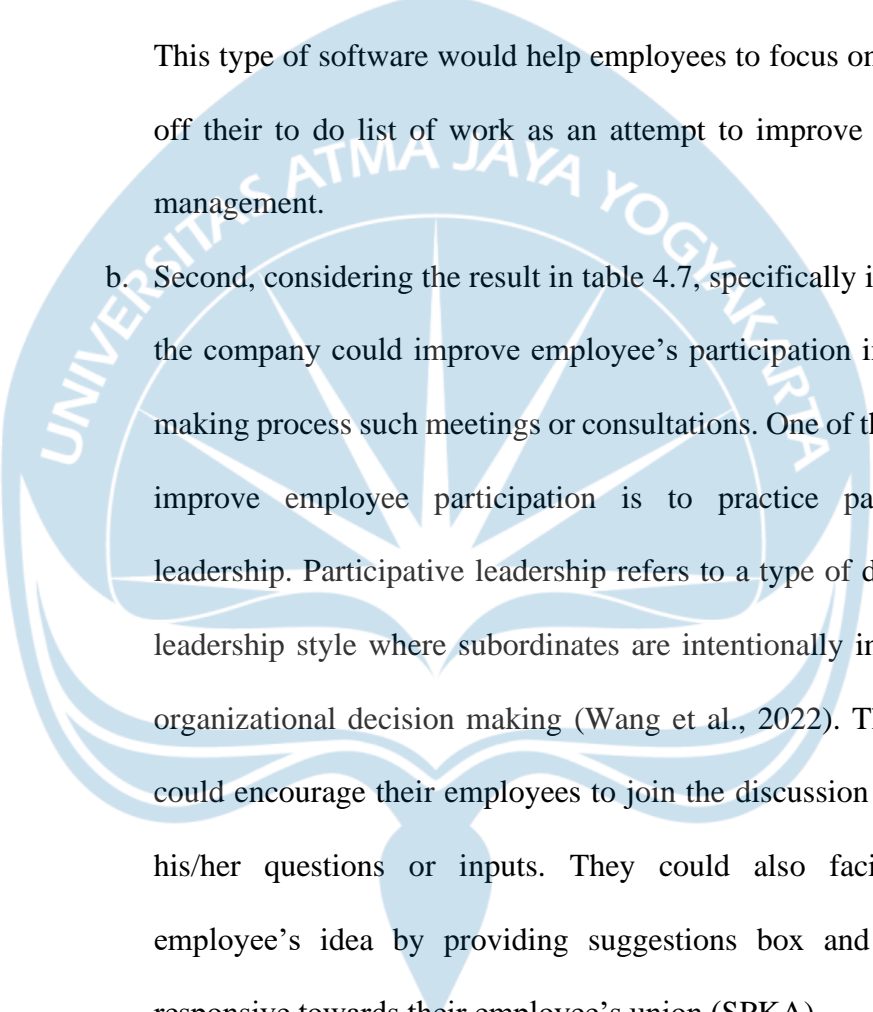
This research is using PT. KAI, specifically Daop 6 as the research object. As one of state-owned companies that operated across sizeable

stations from Yogyakarta to Solo namely Lempuyangan, Tugu, Klaten, Purwosari, Solo Balapan (Lupitasari, 2020). With a total of 1.273 active employees, it is extremely difficult to have number of samples that could represent close to the actual population. Besides that, the fact that this survey was distributed online made it impossible for the researcher to control the number of respondents. With limited time given by PT. KAI to distribute the survey, the researcher successfully managed to collect 31 samples.

This research barely reached the minimum sample size requirement according to the rule of thumb by Uma Sekaran and Central Limit Theorem. With that being said, the sample size may affect the generalizability of the findings. Moreover, this research is using convenience sampling thus may also affect the generalizability of the result. In addition, the survey was distributed through a private employee group by Document Senior Supervisor in Daop 6 Lempuyangan Office. This means the respondents may derive from the same office location. The result may only reflect the situation in Daop 6 Lempuyangan Office.

## 5.2 Managerial Implications

Based on the result of the descriptive statistics on each measure, there are a couple of suggestions that the writer would like to propose to PT. KAI Daop 6 Yogyakarta as an attempt to improve employee's performance. The proposed suggestions are:

- 
- a. Considering the result in table 4.6, specifically in item 5, the company could improve employee's time management. The management could invest in time management software that shows daily timetables, fixed schedule, and duty roster (ex: Any.do app). This type of software would help employees to focus on checking off their to do list of work as an attempt to improve their time management.
- b. Second, considering the result in table 4.7, specifically in item 13, the company could improve employee's participation in decision making process such meetings or consultations. One of the ways to improve employee participation is to practice participative leadership. Participative leadership refers to a type of democratic leadership style where subordinates are intentionally involved in organizational decision making (Wang et al., 2022). The leaders could encourage their employees to join the discussion by asking his/her questions or inputs. They could also facilitate the employee's idea by providing suggestions box and be more responsive towards their employee's union (SPKA).

### 5.3 Suggestions for Future Research

1. This research sample size is considered minor compared to the population. Therefore, the researcher suggests the future research to have larger sample size.

- 
2. This research is conducted on one organization. For future research, the researcher suggests making comparative research between 2 or more organization to have better insight on the effect of subjective well-being on work performance.



## 6 REFERENCES

- Albuquerque , B. (2010, January 16). *What is Subjective Well-being? Understanding and Measuring Subjective Well-being*. Retrieved November 22, 2022, from Positive Psychology: <http://positivepsychology.org.uk/subjective-well-being/>
- Amstrong, M. (2012). *Armstrong's Handbook of Human Resource Management* (Vol. XII). London: Koganpage.
- Andrews, F. M., & Withey, S. B. (1976). *Social Indicators of Well-being: Americans' Perceptions of Life Quality*. Nwe York: Plenum Press .
- Badan Pusat Statistik. (2021). *Dimensi Kepuasan Hidup Indeks Kebahagiaan 2021*. Jakarta: Badan Pusat Statistik RI. Retrieved November 26, 2022, from Badan Pusat Statistik Website: <https://www.bps.go.id/indicator/34/627/1/dimensi-kepuasan-hidup-indeks-kebahagiaan.html>
- Bakker , A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and Work Engagement: The JD-R Approach. *Organizational Psychology and Organizational Behaviour*, 389-411. doi:10.1146/annurev-orgpsych-031413-091235
- Beardwell, J., & Thompson, A. (2017). *Human Resource Management: A Contemporary Approach* (Vol. 8). London: Pearson.
- Bhattacharya, M., Gibson, D. E., & Doty, D. H. (2005). The Effects of Flexibility in Employee Skills, Employee Behaviors, and Human Resource Practices on Firm Performance. *Journal of Management*.
- Bititci, U. S. (2015). *Managing Business Performance: The science and the Art*. Chichester: Wiley & Sons, Ltd.
- Borman, W. C., & Motowidlo, S. M. (1993). Expanding the Criterion Domain to Include Elements of Contextual Performance. In W. C. Borman, & N. Schmitt, *Personnel Selection in Organizations* (pp. 71-98).
- Bougie, R., & Sekaran, U. (2019). *Research Methods for Business* (Vol. VIII). New Jersey, United States of America: Wiley.
- Breu, K., Hemingway, C. J., & Bridger, D. (2002). Workforce Agility: The New Employee Strategy for the Knowledge Economy. *Journal of Information Technology*. doi:<https://doi.org/10.1080/02683960110132070>
- Chen, H. J., & Budidarma, I. A. (2020). Performance of Banks in Indonesia: The Importance of Bank Diversification and Corporate Governance. 1.

- Chen, Z. X., & Francesco, A. M. (2003). The Relationship between the Three Components of Commitment and Employee Performance in China. *Journal of Vocational Behavior*, 490-510.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). New York: Lawrence Erlbaum Associates.
- Cooper, C. L. (2000). *Industrial and Organizational Psychology: Linking Theory with Practice*. (E. A. Locke, Ed.) Wiley-Blackwell.
- Crant, J. M. (2000). Proactive Behavior in Organizations. *Journal of Management*, 435-462.
- Cummins, R. A., Mellor, D., Stokes, M., & Lau, A. L. (2019). Measures of Subjective Well-being. 410.
- Davis, K., & Newstrom, J. W. (1989). *Organizational Behavior: Human Behavior at Work*. New York: McGraw-Hill Book.
- Diamantidis, A. D., & Chatzoglou, P. (2018). Factors affecting employee performance: an empirical approach. *Productivity and Performance Management*, 171-193.
- Diener, E., & Diener, R. B. (2008). *Happiness: Unlocking the Mysteries of Psychological Wealth*. John Wiley & Sons. doi:10.1002/9781444305159
- Diener, E. (1984). Subjective Well-being. *Psychological Bulletin*, 565.
- Diener, E., & Chan, M. Y. (2011). Happy People Live Longer: Subjective Well-Being Contributes to Health and Longevity. *Health and Well-being*, 1-43.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 71.
- Diener, E., Lucas, R. E., & Oishi, S. (2002). Subjective well-being: The science of happiness and life satisfaction. *The Oxford Handbook of Positive Psychology*. doi:10.1093/oxfordhb/9780195187243.013.0017
- Diener, E., Lucas, R. E., & Scollon, C. N. (2006). Beyond the hedonic treadmill: revising the adaptation theory of well-being. *American Psychological Association*, 305-314.
- Fawcett, S. E., Magnan, G. M., & McCarter, M. W. (2008). The bridges, barriers, and benefits to supply chain management. *Supply Chain Management: An International Journal*, 35-48.
- Garg, N., & Singh, P. (2019). Work engagement as a mediator between subjective well-being and work and health outcomes. *Management research review*, 735-752.

- Ghozali, I. (2005). *Aplikasi Analisis Multivariate dengan SPSS*. Semarang: Badan Penerbit Undip.
- Ghozali, I. (2012). *Aplikasi Analisis Multivariate dengan Program IBM SPSS*. Semarang: Badan Penerbit – Universitas Diponegoro.
- Grant, A. M., & Ashford, S. J. (2008). The Dynamics of Proactivity at Work. *Research in Organizational Behavior*, 3-34.
- Grant, A. M., & Parker, S. K. (2009). Redesigning work design theories: The rise of relational and proactive perspectives. *The Academy of Management Annals*, 317–375.  
doi:<https://psycnet.apa.org/doi/10.1080/19416520903047327>
- Hag, M. S., & Tentama, F. (2022). The Role of Cognitive and Affective in Reflecting Subjective Well-being. *American Scientific Research Journal for Engineering, Technology, and Sciences*, 264.
- Hale, J. (2002). Performance-Based evaluation - Tools and techniques to measure the impact of training.
- Hartanti. (2017). THE DETERMINANT FACTORS OF WORKER'S SUBJECTIVE WELL-BEING. *International Journal of Advance Research*, 2230.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 513-524.  
doi:<https://psycnet.apa.org/doi/10.1037/0003-066X.44.3.513>
- Ilies, R., Judge, T., & Wagner, D. (2006). Making Sense of Motivational Leadership: The Trail from Transformational Leaders to Motivated Followers. *Journal of Leadership and Organizational Studies*, 1-22.  
doi:10.1177/10717919070130010301
- Kets de Vries, M. F. (2021, April 8). *Harvard Business Review: Managing People*. Retrieved March 28, 2023, from Harvard Business Review: <https://hbr.org/2021/04/managing-a-chronic-complainer>
- Kleynhans, R., Markham, L., Meyer, W., Aswegen, S. V., & Pilbeam, E. (2006). *Human Resource Management: Fresh Perspectives*. Cape Town: Pearson Education South Africa Ltd.
- Koopmans, L., Villagrasa, P., Barrada, J., & Rio, E. (2019). Assessing Job Performance Using Brief Self-report Scales: The Case of the Individual Work Performance Questionnaire. *Journal of Work and Organizational Psychology*, 199. Retrieved from <https://www.redalyc.org/journal/2313/231362057006/231362057006.pdf>

- Koopmans, L., Coffeng, J. K., Bernaards, C. M., Boot, C. R., Hildebrandt, V. H., Vet, H. C., & Beek, A. J. (2014). Responsiveness of the individual work performance. *BMC Public Health*, 1471-2458.
- Lippe, T. V. (2014). *Satisfaction with Life as a Whole*. Dordrecht: Springer.
- Lumen. (2020). *Principles of Management*. Retrieved October 14, 2022, from <https://courses.lumenlearning.com/>:  
<https://courses.lumenlearning.com/wmopen-principlesofmanagement/chapter/attitudes-that-affect-job-performance/>
- Lupitasari, J. A. (2020). *Sistem Prosedur Pelayanan Angkutan Barang Pada PT. Kereta Api Indonesia (Persero) Daop 6 Yogyakarta*. Yogyakarta : Universitas Islam Indonesia . Retrieved from Daerah Operasi VI Yogyakarta: [http://p2k.unkris.ac.id/id3/1-3065-2962/Daerah-Operasi-Vi-Yogyakarta\\_55142\\_p2k-unkris.html](http://p2k.unkris.ac.id/id3/1-3065-2962/Daerah-Operasi-Vi-Yogyakarta_55142_p2k-unkris.html)
- Lyubomirsky, S., King, L., & Diener, E. (2005). The Benefits of Frequent Positive Affect: Does Happiness Lead to Success? *Psychological Bulletin* , 803-855.
- Maddux, J. E. (n.d.). *University News: Theories of Subjective Well-being*. Retrieved November 22, 2022, from George Mason University Website: <https://wellbeing.gmu.edu/theories-of-subjective-well-being/#:~:text=Life%20circumstance%20theories%20propose%20that,%2C%20education%2C%20and%20physical%20health.>
- Margolis, S., Schwitzgebel, E., Ozer, D. J., & Lyubomirsky, S. (2019). A New Measure of Life Satisfaction: The Riverside Life Satisfaction Scale. *Journal of Personality Assessment* , 621-630.  
doi:10.1080/00223891.2018.1464457
- Maslow, A. H. (1943). A Theory of Human Motivation. *Psychological Review*, 370-396.
- Matthews , B., & Ross, L. (2010). *Research methods: A Practical guide for the social sciences*. Essex: Pearson Education Limited .
- Meyer, J. P., & Allen, N. J. (1997). Commitment in the workplace: Theory, research, and application. *American Psychological Association*.
- Montgomery, D. C., Peck, E. A., & Vining, G. (2021). *Introduction to Linear Regression Analysis* (Vol. VI). Hoboken, USA: John Wiley and Sons, Inc.
- Morgeson, F. P., Reider, M. H., & Campion, M. A. (2005). SELECTING INDIVIDUALS IN TEAM SETTINGS: THE IMPORTANCE OF SOCIAL SKILLS, PERSONALITY CHARACTERISTICS, AND TEAMWORK KNOWLEDGE. *Personnel Psychology*, 583–611.



- Morrison, E. W., & Phelps, C. C. (1999). Taking charge at work: Extrarole efforts to initiate workplace change. *Academy of Management Journal*, 403–419.
- Moscoso, S., & Salgado, J. F. (2021). Meta-analytic Examination of a Suppressor Effect on Subjective Well-Being and Job Performance Relationship. *Journal of Work and Organizational Psychology*, 119-131.
- Motowidlo, S. J., & Van Scotter, J. R. (1994). Evidence That Task Performance Should Be Distinguished from Contextual Performance. *Journal of Applied Psychology*, 475-480.
- Motowidlo, S. J., Borman, W. C., Schmit, M. J., & . (1997). A theory of individual differences in task and contextual performance. *Human Performance*, 1.
- Muzakki, Eliyana, A., & Muhtadi, R. (2019). Is Employee Performance Affected by Organizational Cuoture, Work Motivation and Organizational Citizenship Behavior (OCB)?: An Empirical Investigation . (*International Journal of Integrated Education, Engineering and Business*, 36.
- National Research Council . (2013). *Subjective Well-being: Measuring Happiness, Siffering, and Other Dimensions of Experience*. Washington D.C : The National Academies Press.
- Neubert, M. J., & Dyck , B. (2014). *Organizational Behavior* . Hoboken: Wiley.
- OECD. (2013). OECD Guidelines on Measuring Subjective Well-being,. doi:<https://doi.org/10.1787/9789264191655-en>
- Parker, J. G., Rubin, K. H., Erath, S. A., Wojslawowicz, J. C., & Buskirk, A. A. (2006). Peer Relationships, Child Development, and Adjustment: A Developmental Psychopathology Perspective. 419-493. doi:10.1002/9780470939383.ch12
- Parker, S. K., & Collins, C. G. (2010). Taking stock: Integrating and differentiating multiple proactive behaviors. *Journal of Management*, 633–662.
- Pavot, W., & Diener, E. (2008). The Satisfaction With Life Scale and the emerging construct of life satisfaction. *The Journal of Positive Psychology*, 137–152.
- Ployhart, R. E., & Bliese, P. D. (2006). Individual adaptability (I-ADAPT) theory: Conceptualizing the antecedents, consequences, and measurement of individual differences in adaptability. 3-39. doi:10.1016/S1479-3601(05)06001-7

- Plys, E., & Desrichard, O. (2020). Associations Between Positive and Negative Affect and the Way People Perceive Their Health Goals. *Health Psychology, 2*.
- Prince, J. L. (1997). Handbook of organizational measurement. *International Journal of Manpower*.
- Proctor, C. (2014). Subjective Well-being. *Positive Psychology, 6437*.
- PT. KAI. (2009). *Profil Perusahaan*. Bandung: PT. KAI.
- PT. KAI. (2022, February 7). *Berita: Kesejahteraan yang Baik, untuk Pelayanan yang Terbaik*. Retrieved November 16, 2022, from KAI Website: [https://www.kai.id/information/full\\_news/5244-kesejahteraan-yang-baik-untuk-pelayanan-yang-terbaik](https://www.kai.id/information/full_news/5244-kesejahteraan-yang-baik-untuk-pelayanan-yang-terbaik)
- Pulakos, E. D., & Dorsey, D. W. (2002). Predicting Adaptive Performance: Further Tests of a Model of Adaptability. *Human Performance, 299-323*. doi:10.1207/S15327043HUP1504\_01
- Rotundo, M., & Sackett, P. R. (2002). The relative importance of task, citizenship, and counterproductive performance to global ratings of job performance: A policy-capturing approach. *Journal of Applied Psychology, 66-80*.
- Ryan, R. M., & Deci, E. L. (2000). Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being. *American Psychologist, 68-78*.
- Salgado, J. F., Blanco, S., & Moscoso, S. (2019). Subjective Well-being and Job Performance: Testing of a Suppressor Effect. *Journal of Work and Organizational Psychology, 93-102*. doi:<https://doi.org/10.5093/jwop2019a9>
- Shahnaz, I., & Karim, R. (2014). Life Satisfaction as a Determinant of Life Engagement. *Bangladesh Psychological Studies, 1*.
- Singh, P., Suar, D., & Leiter, M. P. (2012). Antecedents, Work-Related Consequences, and Buffers of Job Burnout Among Indian Software Developers. *Journal of Leadership & Organizational Studies, 83-104*.
- Sodexo. (n.d.). *Blog*. Retrieved 03 19, 2023, from SOdexo Quality of Life Services: <https://www.sodexoengage.com/blog/rewards-recognition/applying-maslows-hierarchy-of-needs-theory-to-hr-responsibilities>
- Stockemer, D. (2019). *Quantitative Methods for the Social Sciences: A Practical Introduction with Examples in SPSS and Stata*. Switzerland: Springer. doi:<https://doi.org/10.1007/978-3-319-99118-4>

- Sugiyono. (2017). *Metode Penelitian: Kuantitatif, Kualitatif, dan R&D*. Bandung: CV. Alfabeta.
- Sutcliffe, k. M., & Huber, G. P. (1998). Firm and industry as determinants of executive perceptions of the environment. *Strategic Management Journal*, 793-807.
- Taber, K. S. (2017). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. 1282.
- Tajfel, H., & Turner, J. C. (1979). Social Identity Theory. 1781-1783.
- Tenney, E. R., Poole, J. M., & Diener, E. (2016). Does positivity enhance work performance?: Why, when, and what we don't know. *Journal of Organizational Behaviour*. doi:10.1016/j.riob.2016.11.002
- University of California . (2022, August 5). *Primary, Secondary, and Tertiary Sources*. Retrieved from UC Merced Library: <https://libguides.ucmerced.edu/source-types>
- University of the Witwatersrand. (2022, March 5). *Research Support: Research Methodology*. Retrieved from University of the Witwatersrand website: <https://libguides.wits.ac.za/c.php?g=693518&p=4914913>
- vansteenkiste, M., & Ryan, R. M. (2013). On Psychological Growth and Vulnerability: Basic Psychological Need Satisfaction and Need Frustration as a Unifying Principle. *Journal of Psychotherapy Integration*, 263-280.
- Wang, G., Zhang, W., Chen, Q., & Zeng, R. (2018). How is negative affect associated with life satisfaction? The moderating role of online self-disclosure in China's context. *Personality and Individual Differences* , 60-66.
- Wang, Q., Hou, H., & Li, Z. (2022). Participative Leadership: A Literature Review and Prospects for Future Research. *Organizational Psychology*. doi:<https://doi.org/10.3389/fpsyg.2022.924357>
- Watanabe, R. M., Uchida, T., Orsini, P., & Benton, C. (2017). Organizational virtuousness and job performance in Japan: does happiness matter? 2.
- Watanabe, R. M., Uchida, T., Orsini, P., & Benton, C. F. (2020). Organizational virtuousness, subjective well-being, job performance: Comparing employees in France and Japan. 1.
- Watson, D., & Clark, L. A. (1988). Development and Validation of Brief Measures of Positive and Negative Affect: The PANAS Scales. *Personality and Social Psychology*, 1063.

Wright, P., & Snell, S. A. (1997). Toward a Unifying Framework for Exploring Fit and Flexibility in Strategic Human Resource Management. *The Academy of Management Review*, 97-13.



## 7 APENDIXES

### 7.1 SPSS Validity Test Result

		Correlations					
		X01	X02	X03	X04	X05	Total
X01	Pearson Correlation	1	.808**	.699**	.832**	.713**	.910**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	31	31	31	31	31	31
X02	Pearson Correlation	.808**	1	.776**	.850**	.616**	.895**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	31	31	31	31	31	31
X03	Pearson Correlation	.699**	.776**	1	.833**	.673**	.882**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	31	31	31	31	31	31
X04	Pearson Correlation	.832**	.850**	.833**	1	.646**	.917**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	31	31	31	31	31	31
X05	Pearson Correlation	.713**	.616**	.673**	.646**	1	.849**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	31	31	31	31	31	31
Total	Pearson Correlation	.910**	.895**	.882**	.917**	.849**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	31	31	31	31	31	31

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Correlations**

	Y01	Y02	Y03	Y04	Y05	Y06	Y07	Y08	Y09	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Total	
Y01	Pearson Correlation Sig. (2-tailed) N	1 .758** 31	.758** .000 31	.790** .000 31	.812** .000 31	.751** .000 31	.684** .000 31	.757** .000 31	.697** .000 31	.509** .003 31	.509** .003 31	.620** .000 31	.601** .000 31	-.140 .454 31	-.097 .605 31	-.193 .298 31	-.024 .899 31	-.045 .810 31	.662** .000 31	
Y02	Pearson Correlation Sig. (2-tailed) N	.758** .000 31	1 .000 31	.791** .000 31	.783** .000 31	.858** .000 31	.677** .000 31	.587** .001 31	.717** .000 31	.776** .000 31	.464** .009 31	.464** .009 31	.694** .000 31	.574** .001 31	-.162 .384 31	-.119 .522 31	-.079 .672 31	-.110 .557 31	-.121 .518 31	.636** .000 31
Y03	Pearson Correlation Sig. (2-tailed) N	.758** .000 31	.791** .000 31	1 .000 31	.783** .000 31	.776** .000 31	.677** .000 31	.587** .001 31	.717** .000 31	.689** .000 31	.405* .024 31	.405* .024 31	.556** .001 31	.627** .000 31	-.215 .245 31	-.119 .522 31	-.215 .244 31	-.110 .557 31	-.121 .518 31	.582** .001 31
Y04	Pearson Correlation Sig. (2-tailed) N	.790** .000 31	.783** .000 31	.783** .000 31	1 .000 31	.867** .000 31	.742** .000 31	.724** .000 31	.727** .000 31	.728** .000 31	.536** .002 31	.536** .002 31	.779** .000 31	.696** .000 31	-.114 .542 31	-.023 .902 31	-.100 .591 31	-.027 .884 31	-.052 .781 31	.723** .000 31
Y05	Pearson Correlation	.812** .000 31	.858** .000 31	.776** .000 31	.867** .000 31	1 .000 31	.794** .000 31	.664** .000 31	.743** .000 31	.763** .000 31	.611** .002 31	.611** .002 31	.748** .000 31	.764** .000 31	-.163 .022 31	-.062 .062 31	.004 .004 31	.014 .014 31	.781** .000 31	

	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.380	.905	.740	.983	.939	.000
	N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
Y06	Pearson Correlation	.751**	.677**	.677**	.742**	.794**	1	.549**	.510**	.532**	.529**	.529**	.657**	.649**	-	-	-	-	-	.626**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.001	.003	.002	.002	.002	.000	.000	.212	.516	.616	.966	.831	.000
	N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
Y07	Pearson Correlation	.684**	.587**	.587**	.724**	.664**	.549**	1	.829**	.753**	.530**	.530**	.819**	.803**	-	-	-	.017	-	.671**
	Sig. (2-tailed)	.000	.001	.001	.000	.000	.001		.000	.000	.002	.002	.000	.000	.301	.479	.497	.927	.894	.000
	N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
Y08	Pearson Correlation	.757**	.717**	.717**	.727**	.743**	.510**	.829**	1	.907**	.485**	.485**	.723**	.682**	-	-	-	-	-	.595**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.003	.000		.000	.006	.006	.000	.000	.138	.156	.112	.471	.490	.000
	N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
Y09	Pearson Correlation	.697**	.776**	.689**	.728**	.763**	.532**	.753**	.907**	1	.549**	.549**	.789**	.685**	-	-	-	-	-	.665**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.002	.000	.000		.001	.001	.000	.000	.217	.432	.495	.684	.751	.000
	N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
Y10	Pearson Correlation	.509**	.464**	.405*	.536**	.611**	.529**	.530**	.485**	.549**	1	1.000**	.570**	.580**	-	.030	.072	.158	.160	.693**
	Sig. (2-tailed)														.073					

	Sig. (2-tailed)	.003	.009	.024	.002	.000	.002	.002	.006	.001		.000	.001	.001	.695	.874	.700	.397	.391	.000
	N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
Y11	Pearson Correlation	.509**	.464**	.405*	.536**	.611**	.529**	.530**	.485**	.549**	1.000**	.570**	.580**	-.073	.030	.072	.158	.160	.693**	
	Sig. (2-tailed)	.003	.009	.024	.002	.000	.002	.002	.006	.001	.000	.001	.001	.695	.874	.700	.397	.391	.000	
	N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	
Y12	Pearson Correlation	.620**	.694**	.556**	.779**	.748**	.657**	.819**	.723**	.789**	.570**	.570**	.858**	-.109	-.060	.015	.062	.010	.747**	
	Sig. (2-tailed)	.000	.000	.001	.000	.000	.000	.000	.000	.000	.001	.001	.000	.561	.750	.935	.740	.958	.000	
	N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	
Y13	Pearson Correlation	.601**	.574**	.627**	.696**	.764**	.649**	.803**	.682**	.685**	.580**	.580**	.858**	1	-.063	.098	.123	.174	.136	.799**
	Sig. (2-tailed)	.000	.001	.000	.000	.000	.000	.000	.000	.000	.001	.001	.000	.738	.599	.511	.349	.464	.000	
	N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	
Y14	Pearson Correlation	-.140	-.162	-.215	-.114	-.163	-.231	-.192	-.273	-.228	-.073	-.073	.109	.063	1	.878**	.696**	.771**	.771**	.342
	Sig. (2-tailed)	.454	.384	.245	.542	.380	.212	.301	.138	.217	.695	.695	.561	.738	.000	.000	.000	.000	.060	
	N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	
Y15	Pearson Correlation	-.097	-.119	-.119	-.023	-.022	-.121	-.132	-.261	-.146	.030	.030	.060	.098	.878**	1	.838**	.786**	.815**	.461**
	Sig. (2-tailed)	.097	.119	.119	.023	.022	.121	.132	.261	.146	.030	.030	.060	.098	.000	.000	.000	.000	.000	
	N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	



	Sig. (2-tailed)	.605	.522	.522	.902	.905	.516	.479	.156	.432	.874	.874	.750	.599	.000	.000	.000	.000	.009	
	N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	
Y16	Pearson Correlation	-.193	-.079	-.215	-.100	.062	-.094	-.127	-.291	-.127	.072	.072	.015	.123	.696**	.838**	1	.715**	.751**	.437*
	Sig. (2-tailed)	.298	.672	.244	.591	.740	.616	.497	.112	.495	.700	.700	.935	.511	.000	.000		.000	.000	.014
	N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
Y17	Pearson Correlation	-.024	-.110	-.110	-.027	.004	-.008	-.017	-.134	-.076	.158	.158	.062	.174	.771**	.786**	.715**	1	.966**	.538**
	Sig. (2-tailed)	.899	.557	.557	.884	.983	.966	.927	.471	.684	.397	.397	.740	.349	.000	.000	.000		.000	.002
	N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
Y18	Pearson Correlation	-.045	-.121	-.121	-.052	.014	-.040	-.025	-.129	-.059	.160	.160	.010	.136	.771**	.815**	.751**	.966**	1	.530**
	Sig. (2-tailed)	.810	.518	.518	.781	.939	.831	.894	.490	.751	.391	.391	.958	.464	.000	.000	.000	.000		.002
	N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
Total	Pearson Correlation	.662**	.636**	.582**	.723**	.781**	.626**	.671**	.595**	.665**	.693**	.693**	.747**	.799**	.342	.461**	.437*	.538**	.530**	1
	Sig. (2-tailed)	.000	.000	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.060	.009	.014	.002	.002	
	N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

## 7.2 Pearson R-Table

One tail Two tail	10% 20%	5% 10%	2.5% 5%	1% 2%	0.5% 1%	One tail Two tail
<i>n</i>						<i>n</i>
4	0.8000	0.9000	0.9500	0.9800	0.9900	4
5	0.6870	0.8054	0.8783	0.9343	0.9587	5
6	0.6084	0.7293	0.8114	0.8822	0.9172	6
7	0.5509	0.6694	0.7545	0.8329	0.8745	7
8	0.5067	0.6215	0.7067	0.7887	0.8343	8
9	0.4716	0.5822	0.6664	0.7498	0.7977	9
10	0.4428	0.5494	0.6319	0.7155	0.7646	10
11	0.4187	0.5214	0.6021	0.6851	0.7348	11
12	0.3981	0.4973	0.5760	0.6581	0.7079	12
13	0.3802	0.4762	0.5529	0.6339	0.6835	13
14	0.3646	0.4575	0.5324	0.6120	0.6614	14
15	0.3507	0.4409	0.5140	0.5923	0.6411	15
16	0.3383	0.4259	0.4973	0.5742	0.6226	16
17	0.3271	0.4124	0.4821	0.5577	0.6055	17
18	0.3170	0.4000	0.4683	0.5425	0.5897	18
19	0.3077	0.3887	0.4555	0.5285	0.5751	19
20	0.2992	0.3783	0.4438	0.5155	0.5614	20
21	0.2914	0.3687	0.4329	0.5034	0.5487	21
22	0.2841	0.3598	0.4227	0.4921	0.5368	22
23	0.2774	0.3515	0.4132	0.4815	0.5256	23
24	0.2711	0.3438	0.4044	0.4716	0.5151	24
25	0.2653	0.3365	0.3961	0.4622	0.5052	25
26	0.2598	0.3297	0.3882	0.4534	0.4958	26
27	0.2546	0.3233	0.3809	0.4451	0.4869	27
28	0.2497	0.3172	0.3739	0.4372	0.4785	28
29	0.2451	0.3115	0.3673	0.4297	0.4705	29
30	0.2407	0.3061	0.3610	0.4226	0.4629	30
31	0.2366	0.3009	0.3550	0.4158	0.4556	31
32	0.2327	0.2960	0.3494	0.4093	0.4487	32
33	0.2289	0.2913	0.3440	0.4032	0.4421	33
34	0.2254	0.2869	0.3388	0.3972	0.4357	34
35	0.2220	0.2826	0.3338	0.3916	0.4296	35
36	0.2187	0.2785	0.3291	0.3862	0.4238	36
37	0.2156	0.2746	0.3246	0.3810	0.4182	37
38	0.2126	0.2709	0.3202	0.3760	0.4128	38
39	0.2097	0.2673	0.3160	0.3712	0.4076	39
40	0.2070	0.2638	0.3120	0.3665	0.4026	40
41	0.2043	0.2605	0.3081	0.3621	0.3978	41
42	0.2018	0.2573	0.3044	0.3578	0.3932	42
43	0.1993	0.2542	0.3008	0.3536	0.3887	43
44	0.1970	0.2512	0.2973	0.3496	0.3843	44
45	0.1947	0.2483	0.2940	0.3457	0.3801	45
46	0.1925	0.2455	0.2907	0.3420	0.3761	46
47	0.1903	0.2429	0.2876	0.3384	0.3721	47
48	0.1883	0.2403	0.2845	0.3348	0.3683	48
49	0.1863	0.2377	0.2816	0.3314	0.3646	49
50	0.1843	0.2353	0.2787	0.3281	0.3610	50
60	0.1678	0.2144	0.2542	0.2997	0.3301	60
70	0.1550	0.1982	0.2352	0.2776	0.3060	70
80	0.1448	0.1852	0.2199	0.2597	0.2864	80
90	0.1364	0.1745	0.2072	0.2449	0.2702	90
100	0.1292	0.1654	0.1966	0.2324	0.2565	100

### 7.3 Permit to Conduct Survey

