



Jurnal Terapan Manajemen dan Bisnis is licensed under
A Creative Commons Attribution-NonCommercial 4.0 International License.

EFFECT OF EDUCATION AND TRAINING ON PERFORMANCE IN MEDIATION OF VILLAGE APPARATUS WORK MOTIVATION IN SEKATAK DISTRICT, BULUNGAN REGENCY

Roni Paembonan¹⁾, Ana Srie Kaningsih²⁾, Lina Warlina³⁾, Chong Pikbee⁴⁾

- 1) University Terbuka, Tarakan, Indonesia
E-mail: loscules86@gmail.com
- 2) STIE Bulungan Tarakan, tarakan, Indonesia
E-mail: n_juf19@yahoo.co.id
- 3) University Terbuka, Tarakan, Indonesia
E-mail: warlina@ecampus.ut.ac.id
- 4) National University of Kaohsiung, Kaohsiung, Taiwan
E-mail: pikbee55@gmail.com

Abstract

The purpose of this study is to prove the effectiveness of education and training on the performance in the mediation work motivation Sekatak apparatus village in the district of Bulungan. This type of research is explanatory research. Population and sample it is the entire staff of village officials in the district Bulungan Sekatak as many as 124 people, with the technique of total sampling. The data analysis technique used in this study uses a Path Analysis approach. The results showed that the education and training had a positive and significant effect on the work motivation of village apparatus employees. The education and training positive and significantly effect on the performance of employees of village officials. Work motivation has a positive and significant effect on the performance of village apparatus employees. Work motivation as a mediating variable between education and training on the performance of village apparatus employees in Sekatak District, Bulungan Regency.

Keywords: training; work motivation; employee performance

Introduction

The success of an organization or institution in achieving its goals cannot be separated from its Human Resources (HR), because HR will regulate and manage other resources owned by the organization to help realize the goals of the organization itself. Performance is performance which is the result of work produced by employees or real behavior that is displayed in accordance with its role in the organization (Hariandja, 2002: 194). According to Bernadin & Russel quoted by Gomes (2000: 135): "performance is the *outcome* resulting from the function of a particular job or activity during a certain period." Performance is the result and work behavior produced by an employee in accordance with his role in the organization within a certain period. Good employee performance is one of the most important factors in an effort to increase productivity. Therefore, one of the best ways to improve employee performance is to provide education and training to employees in order to motivate employees so that employees can further improve their performance, so that their performance increases and the agency is able to produce products at competitive prices.

Education and training for employees is very important to note, given that education and training will determine the competence of employees in carrying out their duties in completing work. In addition to education and training, there are other factors that play a role in improving employee performance, namely work motivation. According to Rivai (2004:456) states that motivation is a series of attitudes and values that influence individuals to achieve specific things according to individual goals. According to Mangkunegara (2002:93) states that motivation is a condition that moves employees to be able to achieve the goals of their motives. The work motivation of employees will have an impact on employee performance, where employees who have high work motivation will do better than employees who have low work motivation.

This is in line with research conducted by Tuhumena, et al (2017), Prayogi & Nursidin (2018), proving that employee work motivation significantly influences employee performance. The results of this previous study provide a picture that is almost the same as the performance of Village Apparatus employees in Sekatak District, Bulungan Regency, where employees have had a fairly good performance, but the performance must always be improved for the better. This is, given that employee performance must prioritize excellent service to the community, so that people feel comfortable and happy with the performance of the Village Apparatus in Sekatak District, Bulungan Regency. Employees are required to be skilled in using computer and internet applications to speed up employee work. This education and training activity is carried out at least once a year and is carried out in rotation from every employee of the village apparatus in the Sekatak Subdistrict, Bulungan Regency.

This is in line with research conducted by Faruk (2018), Hidayat Budiartama (2018), Ni Made Wasasih , et al (2016), Diansyah & Saepul (2017), Prayogi & Nursidin (2018), proving that the training received by employees is significant effect on employee performance. Employee performance is also influenced by employee work motivation, based on the author's observations in the work environment of Sekatak District, Bulungan Regency, showing that village officials have ups and downs in work motivation. This means that the work motivation of the village apparatus is less stable at work, this is because the monitoring system carried out by the sub-district is still relatively lacking.

Different research results were also found from research conducted by Saranani (2015) which found that education and training had no significant effect on employee performance. This suggests that although there is a general recognition in the literature that training improves firm performance, empirical research does not always provide evidence to support this effect. One possible explanation is that training does not have a direct effect on performance but an indirect effect by improving other organizational outcomes.

Lubis' research (2014) shows that education has no significant effect on motivation. Training has a positive and significant effect on motivation. Motivation has a significant effect on performance. However, motivation does not function to mediate the education variable on performance. But for the training variable on performance, motivation serves to mediate the training variable on performance. The results of research by Guterres, et al (2020), Diansyah & Saepul (2017) also show that there is a link between education and training and employee work motivation.

Education and training is an agency activity with the aim of being able to improve and develop the attitudes, behavior, skills, and knowledge of employees according to the wishes of the relevant agency. If employees have been trained, they will have better abilities and skills, so that they are able to work more effectively and efficiently, and eventually these employees achieve good performance as well. The results of research conducted by Faruk (2018), Hidayat and Budiartama (2018), Ni Made Wasasih , et al (2016), Diansyah & Saepul (2017), Prayogi & Nursidin (2018), prove that the training and training received by employees

is significantly affect employee performance. Based on this theoretical and empirical study, the authors formulate the research hypothesis as follows

According to Moorhead & Griffin (2013), employee performance in an organization can be improved through employee work motivation. Work motivation for employees can be done by doing positive motivation by giving rewards according to employee performance and negative motivation by giving punishment to employees who violate organizational rules. Employees who have high motivation tend to make positive contributions to the organization and vice versa. The results of research conducted by Tuhumena, et al (2017), Prayogi & Nursidin (2018), prove that employee work motivation significantly influences employee performance. Based on this theoretical and empirical study, the authors formulate the research hypothesis as follows

By providing opportunities for employees to attend training, it is hoped that in addition to developing abilities and skills, employees also feel that they have the attention and trust of the company so that they will be motivated to work with a full sense of responsibility. Motivation is important because with motivation it is expected that employees will work hard and be enthusiastic to improve their performance so that company goals can be achieved. The results of research conducted by Guterresa, et al (2020), Diansyah & Saepul (2017), Ni Made Wasasih , et al (2016) , prove that the work motivation variable is proven to be a moderating and mediating variable between the two variables studied. Based on this theoretical and empirical study, the authors formulate the research hypothesis as follows.

Hypothesis 1: Education and training (education and training) have a positive and significant effect on the work motivation of village apparatus employees in Sekatak District, Bulungan Regency .

Hypothesis 2: Education and training (education and training) have a positive and significant effect on the performance of village apparatus employees in Sekatak District, Bulungan Regency

Hypothesis 3: Work motivation has a positive and significant effect on the performance of village officials in Sekatak District, Bulungan Regency

Hypothesis 4: Work motivation has a positive and significant effect as a mediating variable between education and training (training) on the performance of village officials in Sekatak District, Bulungan Regency.

Research Methods

The approach used in this study is a quantitative approach, using explanatory research by testing hypotheses. The form of the relationship between the two variables is causal, namely the independent variable affects the dependent variable. The type of data used is prime data in the form of a total score of respondents' answers to the research questionnaire which is filled out directly by village officials in Sekatak District, Bulungan Regency. The population in this study were all village apparatus employees in Sekatak District, Bulungan Regency, amounting to 124 people. The sampling technique used the saturated sampling method, so the number of samples in this study was the same as the total population of 124 people. The analysis technique in this study uses path analysis with the *Partial Least Square* (PLS) approach.

Result and Discussion

The results of the instrument test used the *corrected item-total correlation*, namely by calculating the correlation between the scores of each question and the total score. An instrument is said to be valid if r arithmetic $>$ r table, where the magnitude of r table = 0.176

and overall the data used is valid. For testing the reliability of all items/questions used in this study, the *Cronbach alpha* formula will be used and all variables are declared reliable.

The results of the *Goodness of fit of the PLS model* are measured through the value of *Q-square predictive relevance*, to measure how well the observed values are produced by the model and also the estimated parameters. The *goodness of fit test* uses the *predictive-relevance value* (Q^2). Rated R^2 each endogenous variable in this study is as follows:

Table 1. R-Square Value

Variable	R ²
Work motivation (Z)	0.463
Employee performance (Y)	0.566

Source: primary data processed by the author, 2020.

The equation for calculating *Q-square predictive relevance* is as follows

$$\begin{aligned}
 Q^2 &= 1 - (1 - R_1^2) (1 - R_2^2) \\
 &= 1 - (1 - 0.463) (1 - 0.566) \\
 &= 1 - (0.537) (0.434) \\
 &= 0.767
 \end{aligned}$$

The calculation results show a *predictive relevance* value of 0.767 or 76.7%, so the model is quite feasible and has a fairly relevant predictive value. The *predictive relevance value* of 0.767 indicates that the diversity of data that can be explained by the model is 76.7% or in other words, the information contained in the data is 76.7% that can be explained by the model. While the remaining 23.3% is explained by other variables (which have not been contained in the model). These results say that the SmartPLS model formed is quite good, because it can explain 76.7% of the overall information, so it is worthy of interpretation.

The next step is testing the *inner model* or structural model to see the relationship between the constructs through the significance value or hypothesis testing. The significance of the estimated parameters provides very useful information about the relationship between the research variables. The basis used in testing the hypothesis is the value contained in the output *inner model path coefficients*.

Table 2. Direct Effects Between Research Constructs

Construct	Influence Weight	t Statistics	t Critical	Information
Training (X) → Motivation (Z)	0.752	10,323	1.96	Significant
Training (X) → employee performance (Y)	0.400	3,919	1.96	Significant
Work motivation (Z) → employee performance (Y)	0.326	2,686	1.96	Significant

Source: primary data processed by the author, 2020.

In PLS statistical testing of each hypothesized relationship is carried out using simulation, in this case the *bootstrapping* method is carried out on the sample. Testing with *bootstrapping* is also intended to minimize the problem of abnormal research data. The results of the *bootstrapping* test from the PLS analysis are as follows:

- A. Education and training (education and training) have a positive and significant effect on the work motivation of village apparatus employees. The results of testing the first hypothesis show that the effect of education and training (training) variables on employee work motivation shows a path coefficient value of 0.752 with a T_{statistical} value

- of 10.323. The value of $T_{\text{statistic}}$ is greater than T_{table} (1.960). These results mean that education and training have a positive and significant effect on the work motivation of village apparatus employees in Sekatak District , Bulungan Regency , meaning that the first hypothesis in this study is accepted.
- B. Education and training (education and training) have a positive and significant effect on the performance of village apparatus employees . The results of testing the second hypothesis indicate that the effect of education and training (training) variables on employee performance shows a path coefficient value of 0.400 with a $T_{\text{statistic}}$ value of 3.919. The value of $T_{\text{statistic}}$ is greater than T_{table} (1.960). These results mean that education and training have a positive and significant effect on the performance of village apparatus employees in Sekatak District , Bulungan Regency , meaning that the second hypothesis in this study is accepted.
- C. Work motivation has a positive and significant effect on the performance of village apparatus employees . The results of testing the third hypothesis indicate that the effect of the work motivation variable on employee performance shows the path coefficient value of 0.326 with a $T_{\text{statistic}}$ value of 2.686. The value of $T_{\text{statistic}}$ is greater than T_{table} (1.960). These results mean that work motivation has a positive and significant effect on the performance of village apparatus employees

Analysis of the *indirect effect (standard indirect effect)* of variables aims to see, know the function or role of the intervening variable, whether it can mediate the relationship (influence) between variables. The following is an explanation of direct, indirect and total effects

Table 3. Indirect Effect and Total Effect

Relationship between variables	Influence		
	Direct	Indirect	Total
Training (X) → work motivation (Z)	0.752		
Training (X) → employee performance (Y)	0.400	0.130	
Work motivation (Z) → employee performance (Y)	0.326		
Training (X) → Performance (Y) through motivation (Z)			0.646

Source: primary data processed by the author, 2020.

The direct and indirect influence between education and training variables on employee performance through work motivation, shows that work motivation as an *intervening* variable or mediating between education and training (training) on the performance of village apparatus employees in Sekatak District, Bulungan Regency. This is because the total effect of 0.646 is greater than the indirect effect of 0.130. This result means that work motivation as a mediating variable between training and performance of village apparatus employees in Sekatak District , Bulungan Regency , means that the fourth hypothesis in this study is accepted.

The results of this study indicate that education and training (education and training) have a positive and significant effect on the work motivation of village apparatus employees in Sekatak District, Bulungan Regency. The results of this study can be interpreted that the education and training activities received by the village apparatus in the Sekatak District, Bulungan Regency are considered to have a positive impact on the motivation of the village apparatus even though the provision of education and training is at least once a year, but seen from the results of the analysis that the training has been going well and motivate employees at work. The perceived impact of this education and training activity is the

increase in employee morale in providing public services to the community. The high work motivation of employees is also based on the fulfillment of primary and secondary needs from their work as village officials. It is hoped that the training will not only be scheduled once a year, so that employee motivation will increase and have an impact on employee performance.

The results of this study support research from Lubis (2014) showing that training has a positive and significant effect on work motivation and research by Guterres, et al (2020), Diansyah & Saepul (2017) also shows that there is an influence between education and training with employee work motivation. This is also based on the opinion of experts who say that according to Rivai (2004) training is part of the learning process to acquire and improve skills outside of educational activities, training is carried out in a relatively short time with direct practice methods. Education and training activities aim to create a positive environment to foster motivation or work spirit because employees acquire or learn specific attitudes, abilities, skills, knowledge, and behaviors related to their work.

The results of this study also indicate that education and training (education and training) have a positive and significant effect on the performance of village apparatus employees in Sekatak District, Bulungan Regency. The results of this study can be interpreted that the education and training activities received by village officials in Sekatak District, Bulungan Regency have an impact on performance, where employees who take part in education and training are able to properly implement the results of the training so that the education and training is considered to have gone well and supports activities or training. employee's job. The perceived impact of this education and training activity is an increase in employee performance in completing work on time.

The results of this study support research from Faruk (2018), Hidayat and Budiartama (2018), Ni Made Wasasih, et al (2016), Diansyah & Saepul (2017), Prayogi & Nursidin (2018), proving that the training and training received by employees is significant effect on employee performance. This is also based on the opinion of experts who explain that according to Siagian (2005), education and training is a teaching and learning process using certain techniques and methods conceptually which is intended to improve the skills and work abilities of a person or group of people.

The results of the study provide information that work motivation has a positive and significant effect on the performance of village apparatus employees in Sekatak District, Bulungan Regency. This can be interpreted that the work motivation of employees is quite good and has an impact on employee performance in carrying out public service activities at the village level. This can also be seen from the interpretation of employees who are highly motivated due to the existence of social relations in the village that support the performance of the local village apparatus. In addition, the village apparatus that excels gets enough appreciation from the sub-district, this is very motivating for employees to improve their work. Therefore, work motivation for employees can be done by doing positive motivation by giving rewards or incentives according to employee performance and doing negative motivation by giving punishment to employees who violate organizational rules. Employees who have high motivation tend to make positive contributions to the village and vice versa. The results of this study support previous research conducted by Tuhumena, et al (2017), Prayogi & Nursidin (2018), proving that employee work motivation significantly affects employee performance. This is in accordance with the opinion of Moorhead & Griffin (2013), the performance of employees in an organization can be improved through employee work motivation.

The results of this study indicate that work motivation as a mediating variable between education and training on the performance of village apparatus employees in

Sekatak District, Bulungan Regency. This means that employee performance has a positive impact due to the training and at the same time being motivated by the Sekatak District government. This shows that to increase employee performance, they can collaborate between training activities and motivate employees at work. The increase in performance can be seen in the results of employees who work according to their targets. Village apparatus employees have a high responsibility for their work. The work motivation carried out by the leadership will determine the high and low performance of employees, so this condition must be used by the leadership to always provide work motivation to subordinates. The results of this study support previous research conducted by Guterresa, et al (2020), Diansyah & Saepul (2017), Ni Made Wasasih, et al (2016), proving that the work motivation variable is proven to be a moderating and mediating variable between the two variables studied.

Conclusion

Based on the results of the analysis in the previous chapter, some conclusions can be drawn as follows

Education and training (education and training) have a positive and significant effect on the work motivation of village apparatus employees in Sekatak District, Bulungan Regency. The results of this study can be interpreted that the education and training activities received by village officials in Sekatak District, Bulungan Regency are considered to have gone well and motivate employees to work.

Education and training (education and training) have a positive and significant effect on the performance of village apparatus employees in Sekatak District, Bulungan Regency. The results of this study can be interpreted that the education and training activities received by village officials in Sekatak District, Bulungan Regency are considered to have gone well and support the activities or work of the employees.

Work motivation has a positive and significant effect on the performance of village officials in Sekatak District, Bulungan Regency. This can be interpreted that the work motivation of employees is quite good and has an impact on employee performance in carrying out public service activities at the village level.

Work motivation as a mediating variable between education and training on the performance of village apparatus employees in Sekatak District, Bulungan Regency.

Based on these conclusions, the authors provide the following suggestions:

- A. To improve employee performance, the human resource factor is the main factor and needs priority attention. To improve the human resources capacity of the village apparatus in the Sekatak Subdistrict, Bulungan Regency, it is necessary to plan educational and training activities that are in accordance with the needs of employees and the work carried out by employees. In addition, leaders need to pay attention to internal factors within employees, namely employee work motivation. Leaders must usually give appreciation to employees who have good performance, so that they can be a stimulus for employees to compete to work well.
- B. It is hoped that village apparatus employees in the Sekatak District, Bulungan Regency, will continue to maintain their performance in serving the public interest. To improve the work ability of employees, employees can take part in training and education activities organized by local governments.
- C. Other studies that are interested in further research related to the performance of village apparatus employees in the Sekatak Subdistrict, Bulungan Regency, can add independent variables that may have a major impact on improving employee performance, for example: work environment, work culture and so on.

References

- Asri, L. (2010). *Budaya organisasi*. Yogyakarta: Graha Ilmu.
- Bangun, W. (2012). *Manajemen sumber daya manusia*. Jakarta: Erlangga
- Bernardin & Russel. (2000). *Human resources management*. New York: Mc Graw Hill.
- Cascio, W. F. (1992). *Managing human resources: Productivity, quality of work. life, profil*. New York: McGraw-Hill Book Company.
- Cushway, B.. (2002). *Human resource management*. Jakarta : PT. Gramedia.
- Dessler, G. (2009). *Manajemen sumber daya manusia*. Buku Jakarta: Indeks
- Dharma, A. (2001). *Manajemen supervisi*. Jakarta : Raja Grafindo Persada.
- Gibson, I. (2008). *Organisasi*. Jakarta: Binarupa Aksara.
- Gomes, F. C. (2000). *Manajemen sumber daya manusia*. Yogyakarta : Andi Offset.
- Ghozali, I. (2014). *Structural Equation Modeling, Metode alternatif dengan. Partial Least Square (PLS)*. Edisi 4. Semarang : Badan penerbit universitas.
- Handoko, T. H. (2001). *Manajemen personalia dan sumber daya manusia*. Yogyakarta: BPFE Yogyakarta
- Hariandja, M. T. E. (2002). *Manajemen sumber daya manusia*. Jakarta : Gramedia Widiasarana.
- _____. (2005). *Manajemen sumber daya manusia*. Jakarta : PT. Gramedia Widiasarana Indonesia.
- Hasibuan, M. S.P. (2005). *Manajemen sumber daya manusia*. Edisi Revisi. Jakarta : Bumi Aksara.
- Mangkunegara, A. P. (2002). *Manajemen sumber daya manusia perusahaan*. Bandung : PT. Remaja Rosda Karya
- _____. (2011). *Manajemen sumber daya manusia*. Bandung: PT. Remaja Rosdakarya
- Mathis, R. L & John. H. J. (2001). *Manajemen sumber daya manusia, jilid 1, (Terjemahan Jimmy S & Bayu P)*. Jakarta : Penerbit Salemba.
- _____. (2002). *Manajemen sumber daya manusia*. Edisi pertama, Cetakan pertama, Yogyakarta : Salemba Empat.
- _____. (2006). *Manajemen sumber daya manusia*. (Terjemahan Jimmy .S & Prawira). Jakarta: Salemba Empat.
- Moorhead, G dan Griffin, R.W. (2013). *Perilaku organisasi : Manajemen sumber daya manusia dan organisasi*. Edisi 9. Jakarta : Penerbit salemba empat.
- Nawawi, H. (2005). *Manajemen sumber daya manusia untuk bisnis yang kompetitif*. Yogyakarta: Cetakan Ke-4, Gajah Mada Univercity Press.
- Notoadmojo, S. (2009). *Pengembangan sumber daya manusia*. Jakarta: Rineka Cipta.
- Riduwan. (2002). *Skala pengukuran variabel-variabel penelitian*. Bandung: Alfabeta.
- Rivai, V & Basri, A. F. M. (2005). *Performance appraisal sistem yang tepat untuk mnilai kinerja karyawan dan meningkatkan daya saing perusahaan*. Jakarta : PT. Raja Grafindo Persada.
- Rivai, V. (2004). *Manajemen sumber daya manusia untuk perusahaan : dari teori ke praktik*. Jakarta : PT. Raja Grafindo Persada.
- Riyanto, S. (2017). *Statistik dengan program IBM SPSS 24: Statistik untuk pemula dan contoh riset penelitian*. Yogyakarta: LeutikaPrio.
- Robbins, S. P. (2006). *Perilaku organisasi*. Edisi kesepuluh. Jakarta: PT Indeks Kelompok Gramedia.
- Saydam, G. (2000). *Manajemen sumber daya manusia*. Jakarta : Gunung Agung
- Sedarmayanti. (2007). *Sumber daya manusia dan produktivitas kerja*. Bandung: Penerbit Mandar Maju.
- Simamora, Henry. (2004). *Manajemen sumber daya manusia*. Yogyakarta : STIE.
- Sumarsono, S. (2009). *Teori dan kebijakan publik ekonomi sumber daya. manusia*. Yogyakarta.
- Sunyoto, D. (2012). *Manajemen sumber daya manusia*. Yogyakarta: CAPS.
- Suwatno. (2001). *Asas-asas manajemen sumber daya manusia*. Bandung: Suci Press.

- Syafaruddin, A. (2001). *Manajemen sumber daya manusia. strategi. keunggulan kompetitif*. BPFE. Yogyakarta
- Wahyudi, B. (2002). *Manajemen sumber daya manusia*. Bandung: Sulita.
- Werther, W., dan Davis, K. (1996). *Human resources and personal management*. New York: McGraw Hill. Inc.
- Diansyah & Tatang.S. (2017) *Pengaruh pelatihan dan kompensasi terhadap kinerja karyawan dengan motivasi sebagai variable intervening pada mikro laju cluster Jakarta 2 PT. Bank CIMB Niaga Tbk Media studi ekonomi*.
- Faruk, U. (2018). *The effect of education and training to employee performance through leadership as intervening variables at PT. Utama Agung Jakarta Indonesia. International Journal of Business and Applied Social Science (IJBASS)*. Vol: 4, Issue: 2. February 2018.
- Fernanda M.B T, Christoffel K. & Frederik G. W. (2017). *Pengaruh pelatihan dan motivasi kerja terhadap kinerja karyawan pada PT. Pegadaian (Persero) Kantor Wilayah V Manado. Jurnal EMBA*. Vol.5 No.2 Juni 2017, hlm. 2124 – 2133.
- Guterresa, Luisinha F Da CostA., Armanu & Rofiaty. (2020). *The role of work motivation as a mediator on the influence of education-training and leadership style on employee performance. Management Science Letters* 10 (2020).
- Hidayat, R & Budiatma, J. (2018). *Education and job training on employee performance. International journal of social sciences and humanities*. Vol. 2 No. 2, April 2018..
- Lubis, Umami S. (2014). *Pengaruh Pendidikan dan pelatihan terhadap motivasi kerja dan dampaknya terhadap kinerja pegawai pada Badan Pemberdayaan Masyarakat dan Pemerintahan Desa Provinsi Sumatera Utara. Masters thesis, Universitas Terbuka*
- Muhammad A P & M. Nursidin. (2018). *Pengaruh pelatihan dan motivasi kerja terhadap kinerja karyawan. Prosiding seminar nasional multidisiplin ilmu Universitas Asahan 2018*.
- Ni Made Wasasih, I Ketut Yadnyana & Ni Ketut Rasmini. (2016). *Pengaruh pendidikan padak Kinerja bendahara dengan pelatihan dan motivasi sebagai pemoderasi. E-Jurnal Ekonomi dan Bisnis Universitas Udayana*.
- Saranani, F. (2015), *Effect of education and training to performance mediated career development inspectorate city employees Kendari. The International Journal of Engineering and Science (IJES)*