Status of the Human Energy Profile in Connection with Predicting Professional Performance

Andronicus TORP
National University of Political Studies and Public Administration
30A Expozitiei Blvd, Sector 1, 012104, Bucharest, Romania
andronicus.torp@facultateademanagement.ro

Abstract. *We believe that the employees are the most valuable asset that any company can have and that they, in order to create sustainable competitive advantages and thus long-term financial success for the company, should be treated in a way that leads them to be able to deliver sustainable top performance. In order to assess the ability of the employees to deliver sustainable top performance, many different performance predictors have been developed throughout the history of Human Resource Management as an academic field. One of the more recent of these is the Human Energy Profile. What is specific about the Human Energy Profile is that it measures the energy potential of the employees and thus goes to a deeper level than other performance predictors. Therefore it can predict elements that other performance predictors cannot; like for example the energy and the stress level of the employees, by which some of the major, and costly, health issues of our time, like employees "burning out" or "going down with stress" can be brought into awareness in time, in order to take actions to prevent them. This paper starts by presenting some of the scientific findings and studies that the Human Energy Profile is based on. Here may, amongst the most important, be mentioned Einstein, Hawking, Hunt, Motoyama, Tiller, etc. Then it presents the present scientific findings regarding the ability of the Human Energy Profile to predict professional performance, to structure the workday in a way that leads the employees to have increased levels of energy and/or decreased levels of stress, and thus indirectly improved performance, as well as to improve employee wellbeing. In the end, it discusses the areas where future scientific studies are needed in order to improve the understanding of, as well as the predictive capacity of the Human Energy Profile in areas such as performance prediction, work structure improvement, employee wellbeing, etc. Here the main focus will be the areas that are still to be examined, for example, the seven different energy domains that the late Dr. Motoyama states that he has found and that he continues are connected with different levels of behavioral characteristics of the human being. Thus does it seem reasonable that the predictive power of the Human Energy Profile may be extended so it also can be used as an objective scientific tool that can determine for example psychometric traits of employees, as well as new candidates. In this way, it can diminish some of the risks that certain areas of Human Resource Management face, such as the inability always to choose the right candidate for a position, the frequent failures regarding organizational integration, etc.*

Keywords: *Human resource management; performance; energy; stress; human capital; SHRM.*

Introduction

Our purpose with this study was to examine the possibility of enriching the present array of HR performance predictors with a new set of performance predictors that are either (1) more accurate than at least some of the present HR performance predictors, or (2) including new elements that are not assessed through the present HR performance predictors. Ideally would, of course, be the new HR performance predictors fulfilled both (1) and (2).

Given the recent promising scientific research in the domain of accessing the energy structure of the human being, we decided that this would be our starting point for the investigation of new HR performance predictors.

Methodology

Prof. Goswami (1995) gives a compelling description of the energy structure of the universe as well as an explanation of how energy and consciousness interact, stating that consciousness is the primordial cause

and thus the element directing the energy. These statements he supports with findings within Quantum Physics, for example, the double-slit experiment. Investigating this further it became clear that many of the findings within physics may also find application in HR. For example Einstein's famous equation of $E=MC^2$ for which at least one possible interpretation is that everything in the universe consists of energy.

Hawking (2010) also seems to be touching this element of the energy structure of the human being when explaining that electromagnetism is the foundation of all of chemistry and biology. At least this seems like a valid interpretation for those who consider the human being a biological being.

The final link that convinced us that there was something worth examining scientifically in this direction was Prof. Tiller (2001) who explained how the functioning of the human being is influenced by the structure of that being, which then again influences the chemical level of the being, and which yet again is influenced by the electromagnetic field of that being. Thus does it seem scientifically founded to, at least, make the hypotheses that there is a connection between the functioning, in our case the performance, of a being and that person's energy structure.

At the practical level this also seems to be confirmed by the scientific work of Hunt (1996), however, Hunts research seemed to be directed more towards the healthy state of the human being, and only indirectly touching elements regarding that person's professional performance.

Finally, did Motoyama (1978) inspire a desire to investigate if, and in a case so which, there might be a connection between the seven different levels of energy that he states the human being has.

Research design, measurement and data collection

A certain technical development is required in order to assess the energy structure of the human being in a way that qualifies for conducting statistically valid scientific experiments. Furthermore is it a requirement that the energy measured provides results that are applicable as performance predictors; measuring the particles of a human being might provide results that are at too small a level to be used, measuring the weight of a person, although from a certain perspective assessing that person's energy, might also not provide any useful result.

Upon examining different tools for assessing the energy of a human being, it was decided to use the Electrophotonic Imaging Device developed by Prof. Korotkov. Although developed for medical use does it also seem almost ideal for application in the domain of HR. First of all is it portable and thus can be used to do assessments where the work is done. It is relatively cheap and easy to use with a straightforward and functional user interface, and probably the most important, it assesses of the person being measured, amongst others, (1) the energy level, (2) the stress level, and (3) seven different levels of energy. If these seven levels of energy are the same as Motoyama has described is not yet clarified, yet a possibility.

The scientific experiments conducted in the course of this study can be divided into three categories:
- Performance prediction
- Work structure
- Employee wellbeing and development

In order to promote clarity in the findings, each category will be presented separately.

Performance prediction

This category is the most important in order to document the applicability of the assessment of the human energy profile in making predictions that may find value within HR. Without the link between the human energy profile and performance, there is no reason for any company or organization to assign importance to the two other categories. If for example, it is possible to increase an employee's energy level through certain wellbeing activities, yet that does not translate directly into the higher performance of that employee, then these wellbeing activities and the resources the company has invested into them are just a waste.

The first study (Torp, 2018) in this category was conducted with a leading B2B travel provider. Sixty-four

of their employees who work with customer support in two different call centers were assessed with the Electrophotonic Imaging Device. The findings were then correlated with the yearly performance review that the company conducts for all its employees.

Upon analyzing the results, it was found that both energy and stress were predictors of the outcome of the performance review. However, no statistical correlation was found between the seven different energy levels and the outcome of the performance review.

The findings are presented in figure 1.

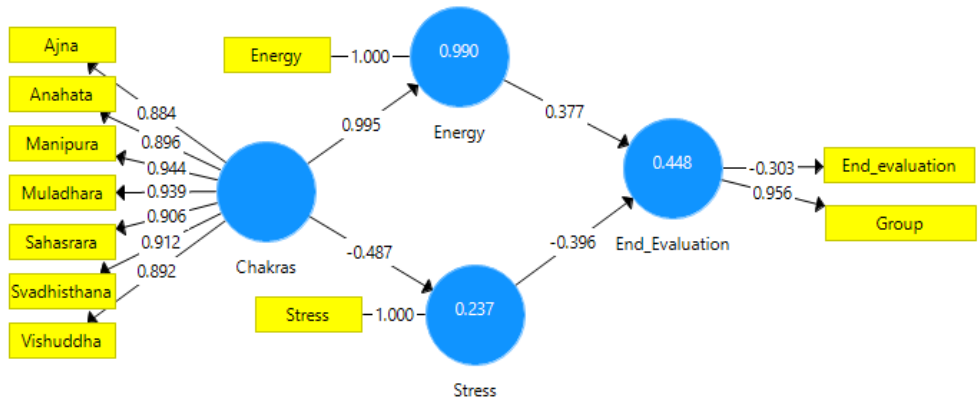

Figure 1. *The relationship between the Human Energy Profile and performance evaluation*

The second study (Torp, 2017A) in this category was conducted in a shipping company. What differs from the first study was that in this study it was the accumulated energy and stress level of all the employees in one branch that was assessed. This was done twice, with exactly one year in between, and then taken as representative for the average energy and stress level for those two years. This was then compared with the financial data that the company provided regarding the branch where the energy assessment was conducted. Thus, this study compares the change in the accumulated human energy profile for all the employees compared with the changes in the financial results of that branch, in one year.

What was found was that there seems to be a connection between the increase in the energy level of the employees and the increase in the financial results; thus that as the accumulated energy level of the employees in the branch increase, so does the financial outcome of that branch. Furthermore, does it also seem that there is a connection between the stress level and the financial outcome; although negative. Thus, as the accumulated stress level goes down does the financial results of the company increase.

The findings are shown in figures 2 and 3.

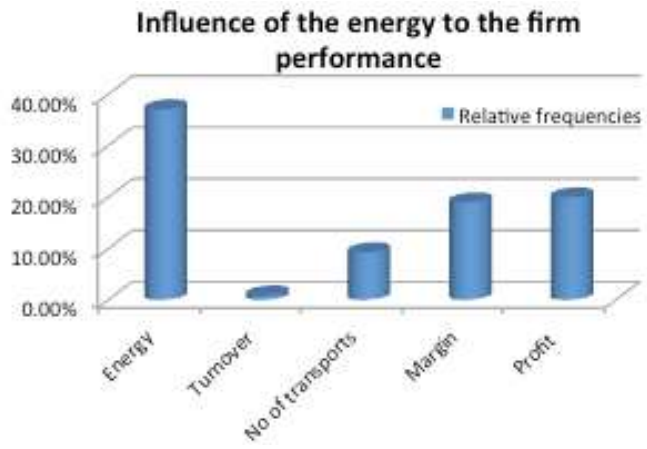

Figure 2. *The relationship between KPI's and energy*

Figure 3. *The relationship between KPI's and stress*

The third study (Torp, 2017B) in this category was conducted at the same company as the second study. What differs in this study from the previously presented studies is that it was based on assessing the human energy profile of each employee every month for a year and a half, while simultaneously getting individual monthly performance data for that employee and then correlating these two findings. The human energy profile data included was energy and stress. The performance data was turnover, profit, and the number of transports.

The findings are shown in figure 4.

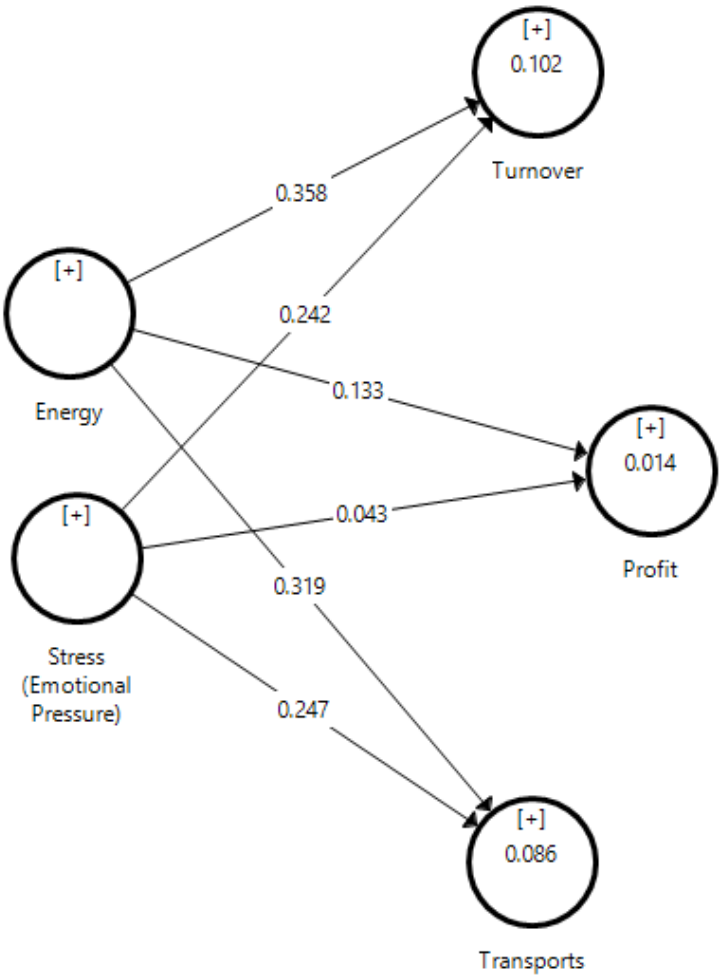

Figure 4. *The relationship between the levels of stress and energy assessed with the Electrophotonic Imaging Device and Turnover, Profit, and Number of Transports*

As can be seen, has there been found a statistically significant positive correlation between both energy and stress and turnover as well as transports, however, between neither and profit. This finding is, at least for the connection between energy and performance, quite similar, also in the statistical correlation, as in the first study presented. However, what differs is that there has been found a statistically valid positive correlation also between stress and performance. This is in sharp contrast to the finding in the first and second studies, where it was found that stress correlates inversely to performance.

The fourth and final study (Torp, 2015A) in this category regards the possibility of predicting academic performance, assessed as grades obtained at a university exam based on assessing the human energy profile. In this study, a group of university students was assessed with the Electrophotonic Imagine Device before taking an exam. The grade they received at the exam was then correlated with the assessment. What differs in this study from the previous, besides the undeniable fact that this study is based on students whereas all the other studies were based on professionals, is that more elements of the outcome of the assessment with the Electrophotonic Imaging Device have been included.

What was found in this study was that it is, at least in this study, possible to predict the outcome (grade) of the exam with an accuracy of 71.43%. This may of course not be universally valid, and may probably be influenced by other factors; such as the domain of study, preparation, cognitive ability, etc.

The findings are shown in figure 5.

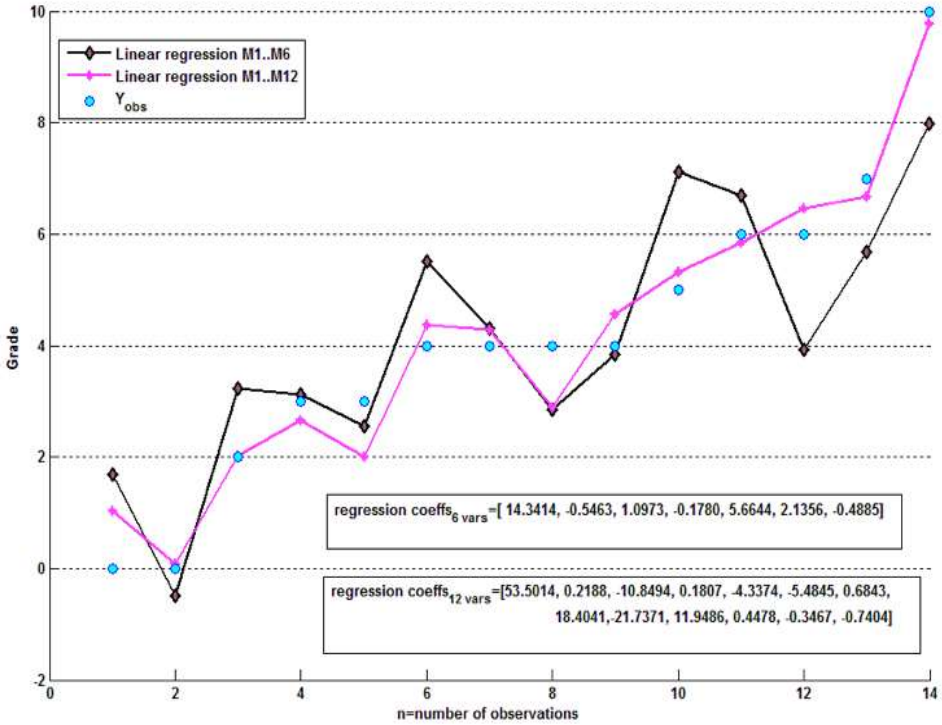

Figure 5. *The relationship between the data assessed with the Electrophotonic Imaging Device and test score*

Conclusions for performance prediction

Although the studies conducted in this category differ in many aspects; like the domain of activity of the employees and companies, timespan, etc., does it seem that the results, at least regarding the connection between energy and performance is consistent; a high level of energy leads to high performance.
Regarding stress does it seem that the findings are not 100% consistent, as three out of four studies found that a negative correlation between stress and performance, while one study has found a positive relationship.

Work structure

The second category deals with how to structure the work, so it leads to the employees having a higher level of energy and/or a lower level of stress, and thus, indirectly, improves performance. In the first study (Torp 2016A) a group of employees was assessed with the Electrophotonic Imaging Device 5 times during a workday:
at 9.00 just before beginning the workday
at 11.00
at 13.00
at 15.00
and finally at 17.00 before returning home after work.

This in order to assess if, and in the case so how, the energy and stress of the employees changed during that workday. The results are showing in figures 6 and 7.

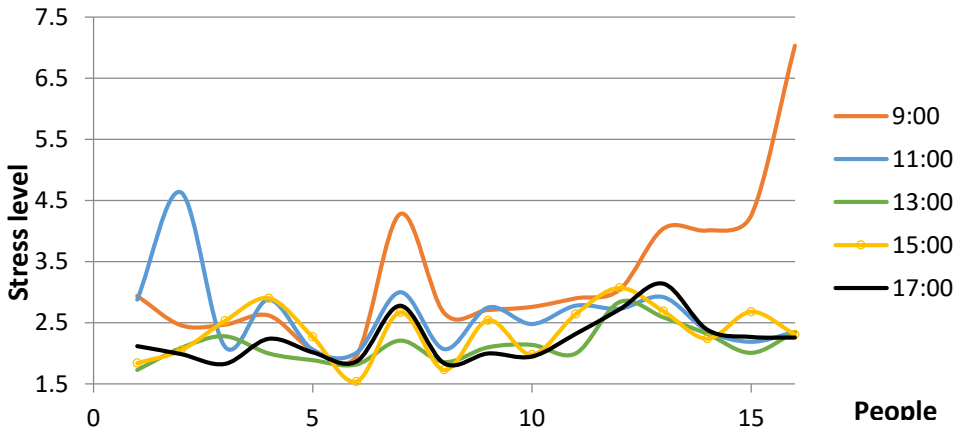

Figure 6. *Stress level during different times of the workday*

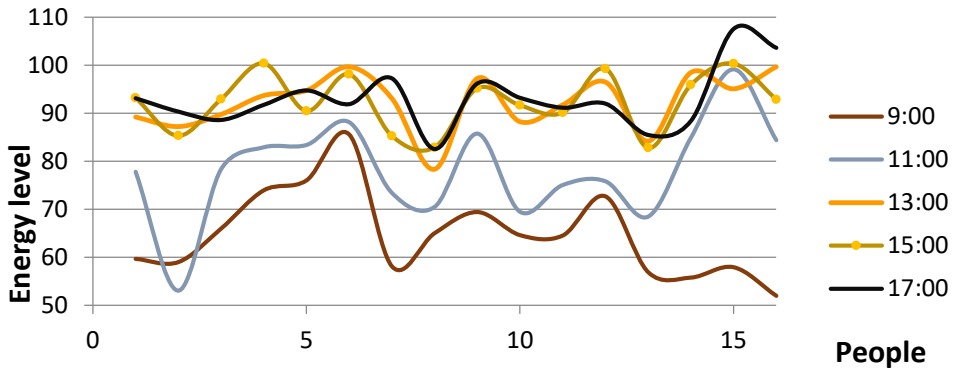

Figure 7. *Energy level during different times of the workday*

As it can be seen are there fluctuations in both the stress as well as in the energy levels of the employees during the workday. Thus, as it has already been concluded that there is a connection between energy and stress and employee performance does it seem reasonable to assume that by structuring the workday, so it leads to either higher levels of energy or lower levels amongst the employees or both, would it improve performance, and thus company success.

The second study (Torp, 2016B) in this category expands the scope of the first study, as it examines how the energy and stress develop during an entire workweek. Once again the employees, although in a different

company, were assessed five times during one workday, again at 9.00, 11.00, 13.00, 15.00, and finally at 17.00, yet this was done for five consecutive days.

The results are shown in Tables 1 and 2 for energy and stress, respectively.

Table 1. *Relative Decreasing in Stress (Torp et al., 2016B)*

Relative decreasing Stress (RDS)	Day 1 (Monday)	Day 2 (Tuesday)	Day 3 (Wednesday)	Day 4 (Thursday)	Day 5 (Friday)
Employee1	42.9752%	-32.6829%	-4.3825%	-40.8115%	1.3100%
Employee2	0.7916%	-16.3569%	8.3682%	17.9389%	16.8627%
Employee3	-9.4118%	3.5857%	20.3463%	-56.3406%	8.6124%
Employee4	14.8699%	-12.4590%	-5.1903%	9.9585%	-5.9055%
Employee5	14.0097%	-13.0268%	28.4404%	2.6316%	-15.0171%
Employee6	-33.3333%	-16.9675%	-12.4031%	6.6148%	10.1852%
Employee7	-39.4737%	-25.6798%	-8.3624%	-26.2136%	-27.9330%

Table 2. *Relative Increasing in Energy (Torp et al., 2016B)*

Relative Increasing Energy (RIE)	Day 1 (Monday)	Day 2 (Tuesday)	Day 3 (Wednesday)	Day 4 (Thursday)	Day 5 (Friday)
Employee1	-24.8469%	17.0461%	13.7923%	38.9849%	3.0685%
Employee2	16.1123%	3.0010%	16.3364%	-7.4256%	0.8074%
Employee3	4.6935%	-4.1389%	-2.8880%	29.2385%	8.3992%
Employee4	-16.5095%	-8.3043%	-0.8925%	9.6508%	-1.6492%
Employee5	-11.9601%	3.7303%	6.7062%	13.8601%	0.7085%
Employee6	12.3960%	9.9798%	3.1491%	10.0084%	-7.3986%
Employee7	18.2853%	3.9490%	5.8771%	35.7315%	13.1460%

What was found is that, regarding energy, Wednesday follows Tuesday, and Friday follows Thursday. Thus, in case an employer wishes to implement initiatives that aim at increasing the energy level of the employees would the initiatives, at least in the examined company, lead to better results, and thus higher ROI, if they were conducted Tuesdays and Thursdays, than any other days of the week. Regarding stress was it found that again Wednesday follows Tuesday, and thus would it be more profitable to implement stress reduction programs Tuesday than any other day of the week.

It is questionable if these findings are valid across cultures or generations, yet may indicate that on an individual basis, a company can determine when the best moment for them to implement employee wellbeing programs is.

The third and final study (Torp, 2017C) in this category examined the different outcomes of an employee wellbeing initiative (running and/or walking) on white vs. blue-collar workers. Here it was found that the white-collar workers showed better results - meaning a more significant increase in energy and a larger decrease in stress - as a result of the wellbeing program than the blue-collar workers. Thus may it be concluded that companies implementing wellbeing programs will improve the outcome by adapting it to the needs of different segments of employees.

Conclusions for work structure

In this part, it was found that the energy and stress levels (1) differ both during a workday and the workweek, (2) that these differences correlate with the different work employees do. Thus does it seem reasonable for employers who have the best interest of both their employees and their company in mind.

Employee wellbeing and development

The third and final of the categories is employee wellbeing and development. Here the first study (Torp, 2015B) was regarding the possible influence of electronic devices upon the energy and stress level of the

human being. It was found that there is an influence by the use of phone upon the human energy profile, mostly negative. However, it was also found that the use of the phone to speak with another person had a positive influence on both stress and energy. Thus it seems that electronic devices ought to be used wisely, in order not to experience adverse side effects.

The second study (Torp, 2015C) in this category was regarding the possibility to increase the energy level and/or decrease the stress level of a person through the practice of Aikido. Here an empirical study lasting half a year and including 22 different Aikido practitioners was conducted. Some of the practitioners were measured repeatedly, and thus the total number of measurements became 96. In the course of this study, it was found that the vast majority of the practitioners (87.50%) decrease their stress level as a result of the practice, whereas 83.30% had increased their energy level. Thus does it seem that practicing Aikido is a practical method to increase energy and/or decrease stress that can be used both by individuals and companies for their employees.

The third and final study (Torp, 2016C) that was conducted in this category was regarding mindfulness as a practical method to increase energy and/or decrease stress. Mindfulness was chosen because it seems that it is increasingly being used as a tool by companies (Lorenzen, 2010) mainly to decrease stress amongst employees. This study took course over a week in connection with an intensive mindfulness workshop. Here a total of 106 practitioners were assessed both before and after practice.

The results can be seen in figure 8 and 9 respectively.

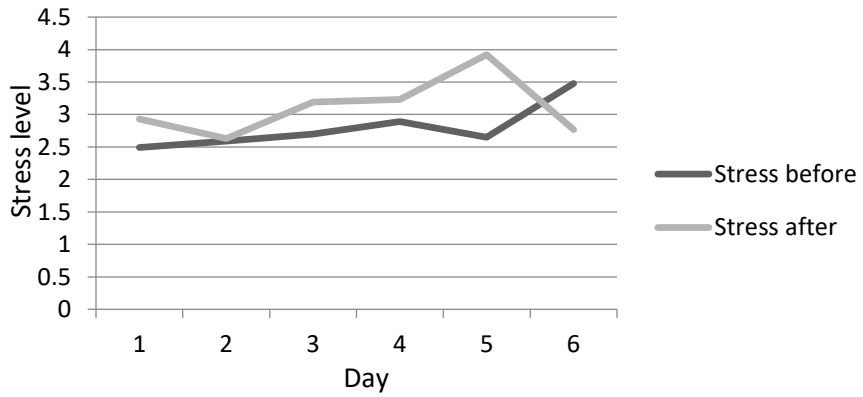

Figure 8. *Stress before and after the practice of mindfulness*

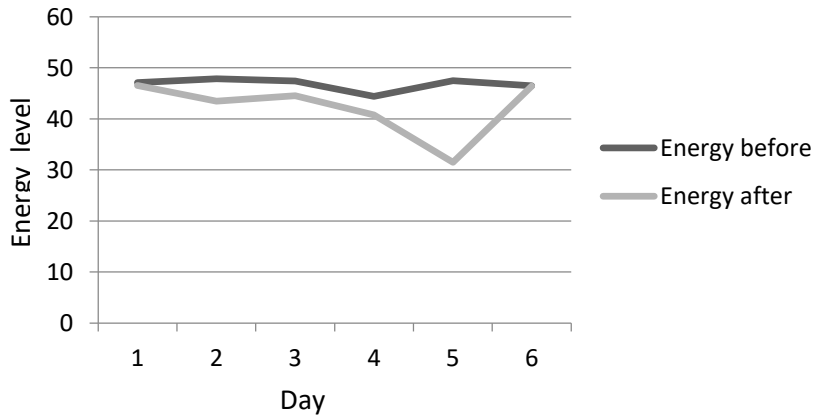

Figure 9. *Energy before and after the practice of mindfulness*

It may be a bit of a surprise that the results regarding the stress assessment show that the practitioners, in the first five out of six days, were more stressed after practice than they were before. Just as surprising may it be that the results obtained show that the energy level of the practitioners was lower on the first five out of the six days of the seminar, and then on the sixth being equal to the level at the beginning of the mindfulness practice.

However, looking at the development of both stress and energy in the week, especially the last day does it seem that there was a positive influence on both by the practice of mindfulness, just that it took some days before this positive influence occurred.

Conclusions regarding the category employee wellbeing and development

It has been found that certain activities/things influence the human energy profile in a negative direction, while other activities and things influence it positively. As there has already been established a connection between the human energy profile and professional performance does it seem logically valid to conclude that a person who wishes to improve his/her individual performance with advantage may perform certain activities while abstaining from other activities. Also, the same is valid for a company that wishes its employees to perform at their highest level.

Conclusions

It has been found that the human energy profile seems to be a valid predictor of professional performance and thus may be added to the present array of HR performance predictors. Furthermore, does it seem to add new aspects that are not assessed by the present HR performance predictors. Thus was the hypothesis of the research project, to a certain degree, confirmed, keeping in mind that one study showed a positive correlation between stress and performance, while all other studies showed a negative correlation between these two elements.

Further research directions

The empirical studies conducted in examining the correlation between the human energy profile and professional performance may be significantly enhanced by conducting more, and vaster, studies in this direction. Furthermore, may the performance prediction of the human energy profile, probably, be improved by combining it with other performance predictors, like cognitive ability. Something that has not at all been investigated so far. Thus, a long and vast series of scientific studies in order to determine the practical applicability of the human energy profile as an HR performance predictor is recommended, based on the findings of this study, that there seems to be a correlation between the human energy profile and professional performance.

References

Goswami, A. (1995). *The Self-aware Universe*. Tascher Penguin.
Hawking, S. (2010\0. *The Grand Design.* London, UK: Bantam Press.
Hunt, VV. (1996). *Infinite mind: The Science of Human Vibrations of Consciousness*. Malibu Publishing.
Lorenzen, E. (2010). *Ind i mindfulness.* Børsens Forlag.
Motoyama, H. (1978). *Science and the Evolution of Consciousness*. Autumn Press.
Tiller, W. (1997). *Science and Human Transformation*. Pavior.
Torp, A., Mandrea, L., & Cipu, C. (2015A). Electrophotonic Imaging – A Possible Predicting Factor for Academic Performance. *Energy Education Science and Technology Part A: Energy Science and Research,* 33(6), 2825-2832.
Torp, A., & Mandrea, L. (2015B\0. The energy emissions produced by the human being and their practical use. *9th International Symposium on Advanced Topics in Electrical Engineering,* ATEE 7133825, pp. 260-264.
Torp, A.M. (2015C). Mindfulness – may diminish stress and increase energy. *Network Intelligence Studies. NIS 5*, 3(1), 73-76.
Torp, A., Cipu, C., & Purcarea, A.A. (2016A). A Workday - From an Energetic Point of View. In *Proceedings of Strategica International Academic Conference* (pp.470-481), Bucharest, RO: Tritonic.

Torp, A., & Cipu, C.E. (2016B). A Workweek – From an Energetic Point of View. In *The 10th International Management Conference - Challenges of Modern Management. November 3rd-4th, 2016 SAMRO. Societatea Academica de Management din Romania* (pp.324-333), Bucharest.

Torp, A., Bunea, A., & Cipu, C. (2016C). Company Aikido – It Seems to be a Practical Method to Reduce Stress and Increase a Person's Energy. *SEA – Practical Application of Science, IV, 1* (10), 27-31.

Torp. A., (2017A). Predicting Company Financial Performance Based on Assessing the Human Energy Profile of the Employees by the Use of the Electrophotonic Imaging Device. In Proceedings of the *SAMRO Confefence The Role of Management in the Economic Paradigm of the XXIst Century" November 2nd-4th, 2017* (pp.82-87).

Torp, A., Andrei, A., & Purcarea, A.A. (2017B). The Relation Between an Employee's Energy Profile and that Person's Professional Performance. In *Proceddings of Strategica 2017.* Bucharest, RO.

Torp, A. (2017C). The AXA Power HR Model. *The 8th International Conference of Management and Industrial engineering* (pp.422-433), FAIMA.

Torp, A., Andrei, A., & Purcarea, A.A. (2018). Human Resource Performance Predictors based on the Human Energy Profile. In *Proceedings of the 12th International Conference on Business Excellence: Innovation and Sustainability in a Turbulent Economic Environment.* 12(1), 975-982. doi: 10.2478/picbe-2018-0087.