

## RESEARCH REVIEW

# THE INFLUENCE OF MOTIVATION, COMMUNICATION, AND EDUCATION ON THE DEVELOPMENT OF FEMALE ENTREPRENEURSHIP

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## ABSTRACT

*Today, entrepreneurship is recognized as a basic element of economic growth and development. In recent years, there has been a development of female entrepreneurship, due to the increasing interest of women in this sphere of business. Women's entrepreneurship today attracts a lot of attention because, in addition to contributing to the creation of jobs and the economic growth of the country, women's entrepreneurship is recognized as a source of competitive advantage and increasing entrepreneurial diversity.*

*Since there are more and more women who decide to start their businesses, the topic of this paper is the analysis of the influence of motivation, communication, and education on the development of female entrepreneurship in the Republic of Croatia.*

**Keywords:** women entrepreneurship, education, motivation, communication

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## INTRODUCTION

The main characteristics of the business conditions of today's companies are frequent and intensive changes [1]. In modern conditions, socio-economic development of regions implies searching for new opportunities and forms of DOIng business [2]. Entrepreneurship is the process of establishing a new business during which the entrepreneur must face all the risks involved in generating income. Some authors believe that the development of competitive advantage should not be increased by reducing costs, but by quality production, innovation, constant development of products and services, a comprehensive concept of services or the ability to quickly respond to customer requests [3], that we can say by developing entrepreneurship, as well as that competitive advantage is important a question that has been emphasized in management and strategic planning in the last few years [4]. Hisrich and Peters [5] define entrepreneurship as “the process of creating something new with value by devoting the necessary time and effort, assuming the accompanying financial, psychic, and social risks, and receiving the resulting rewards of monetary and personal satisfaction and independence”. Entrepreneurship is “a process by which individuals –either on their own or within organizations– pursue opportunities” [6].

Entrepreneurship can be defined as a process that includes all activities that individuals encounter to create value. Entrepreneurship is the engine of economic development of every society, and it is the duty of the state to ensure all conditions for its development [7]. U Alkier [8] states that female entrepreneurship enables women to create jobs and achieve financial independence. Zapalska and Brozik [9] observe female entrepreneurs as a group of women who have broken with traditional roles to explore new ways of economic inclusion.

Some of the most frequently mentioned motives of women for establishing their own business are [10]:

- the desire to use and apply the experience and knowledge gained in previous jobs in their own business;
- desire for greater flexibility and control over one's own time;
- the desire to make independent decisions about their own life and career;
- impossibility of advancement at the previous workplace, thus the absence of challenges in work;
- a recognized chance for success in a certain job;
- opportunity for higher earnings as a measure of success in business;
- the desire to use their potential skills and abilities, personal creativity, and "wire" for entrepreneurship as much as possible;
- "Glass ceiling" syndrome - women see opportunities for advancement, but an invisible barrier (glass ceiling) separates them from that goal. A frequent form of discrimination against women because their contribution is not recognized and valued sufficiently;
- the desire to actively participate in social life and a sense of belonging and usefulness in society;
- striving for employment and income for life;
- the desire to prove their worth to a partner, especially in countries where entrepreneurship is traditionally considered a male activity.

All over the world, women's entrepreneurship contributes to stability, and well-being within the community, and creates economic opportunities for vulnerable groups, such as women, low-income people, and minorities [11]. What motivates women to choose to enter the world of entrepreneurship, and what are the factors that help them to realize their entrepreneurial ideas, is a question that is increasingly present in the public today.

Some of the authors cited education as a factor influencing the decision to enter the world of entrepreneurship [12][13]. Other authors cite motivation as a factor for the development of female entrepreneurship [14][15][16][17], while some studies cite communication as a factor that affects female entrepreneurship [18][19][20].

## WOMEN'S ENTREPRENEURSHIP IN CROATIA

Croatia is a country favorable for the development of women's entrepreneurship, but there are still many problems and obstacles that need to be eliminated to make the support of institutions and the environment permanent and access to financial resources easier [21]. Hisricha et. al. [5] noticed that entrepreneurs differ in different characteristics such as motivation and reasons for starting a business venture, sources of funds, occupation, personality and family characteristics, sources of support, and type of entrepreneurial venture. Table 1 shows a comparison of male and female entrepreneurship.

*Table 1. Comparison between male and female entrepreneurs*

Characteristics	Male entrepreneurs	Female entrepreneurs
Motivation	Achievement-tendency to get things done Personal independence - self-image relating to the status based on the role in corporation is irrelevant Job satisfaction is based on the desire to be in control	Achievement-obtaining a goal Independence - to do it alone
Departure point	Dissatisfaction with present job Sideline in college, present job, or outgrowth of present job Discharge or lay-off Acquisition opportunity	Job frustration Interest in and recognition of opportunity in the area Change in personal circumstances
Sources of funds	Personal assets and savings Bank financing Investors Loans from friends and family	Personal assets and savings Private loans
Occupational background	Experience in line of work Recognised specialist or person who has reached a high level of achievement in that area Competent in a variety of business functions	Experience in area of business Middle-management or administrative-level experience in the field Service-related occupational Background
Personality characteristics	Opinionated and persuasive Goal oriented Innovative and idealistic High level of self-confidence Enthusiastic and energetic Must be own boss	Flexible and tolerant Goal oriented Creative and realistic Medium level of self-confidence Enthusiastic and energetic Ability to deal with the social and economic environment
Background	Age when starting venture 35-45 Father was self-employed University educated - degree in economics or a technical field (usually engineering) First-born child	Age when starting venture 25-35 Father was self-employed University educated - degree in humanities First-born child
Support groups	Friends, professional acquaintances (lawyers, accountants) Business associates Wife	Close friends Husband Family Women's professional groups Trade associations
Type of business started	Manufacturing or construction	Service related-educational services, consulting or public relations

*Source: [22]*

According to the GEM report 2020/21 Women's Entrepreneurship: Thriving Through Crisis (Global Entrepreneurship Monitor - GEM) [23] average global TEA index in 2020 for women is 11%, representing almost half of all active start-up entrepreneurs worldwide. In "adult" companies, the percentage of female owners is 5.6%, which represents one out of three adult companies owned by women.

In Table 2., we can see the share of companies in which the founders are exclusively women. In 2011., that percentage, was 18%, while in 2020 it was 22%. In 2020, the share of companies owned by or exclusively owned by women was 31.7%.

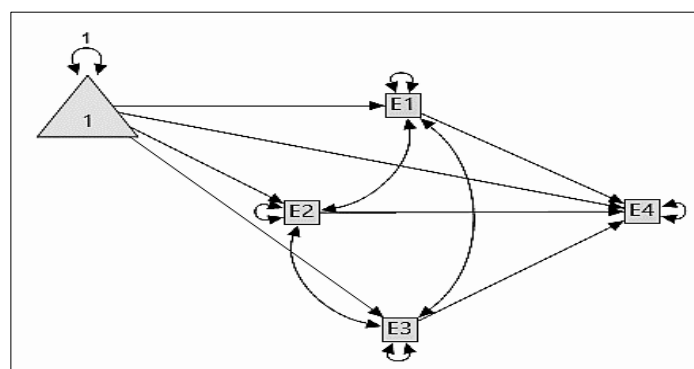
**Table 2.** Number of companies according to ownership structure and gender criteria

/ Tips	The number of entrepreneurs who submitted GFI for the observed year									
	2011.	2012.	2013.	2014.	2015.	2016.	2017.	2018.	2019.	2020.
Female founders	16.458	16.933	18.564	19.972	18.115	23.201	24.572	26.676	28.100	28.759
Female founders %	18.01	18.49	19.65	20.36	18.35	21.77	21.92	22.04	22.08	22.03
Male founders	47.361	47.802	49.872	52.385	47.225	59.436	63.565	70.078	75.146	77.763
Founders of legal entities	7.543	7.551	7.509	7.607	6.444	7.745	8.086	8.473	6.871	8.726
Mixed founders	11.922	12.071	12.168	12.144	10.352	12.124	12.239	12.518	11.998	12.659
Female founders and mixed founders %	31.06	31.67	32.52	32.74	38.83	33.14	32.84	32.38	31.51	31.73
Indeterminate	8.093	7.231	6.380	5.986	16.609	4.087	3.622	3.289	5.143	2.639
Total	91.377	91.588	94.493	98.094	98.745	106.593	112.084	121.034	127.258	130.546

Source: [23]

## EMPIRICAL RESEARCH

To investigate the factors that influence the development of female entrepreneurship in the Republic of Croatia, empirical research was conducted through a survey questionnaire on a sample of 320 respondents in the period from May to June 2022. Questionnaires were distributed in the written and electronic form to respondents. Figure 1 presents the theoretical research model with the following elements: independent elements: Level of motivation (here in after - E<sub>1</sub>); Communication level (here in after - E<sub>2</sub>); Education level (here in after - E<sub>3</sub>), dependent element: Level of women's entrepreneurship (here in after - E<sub>4</sub>). Based on the above, the following tasks were set: Determine whether the level of E<sub>1</sub> does not affect or affects the level of E<sub>4</sub>? Determine whether the level of E<sub>2</sub>, does not affect or affects the level of E<sub>4</sub>? Determine whether the level of E<sub>3</sub>, does not affect or affects the level of E<sub>4</sub>? The ultimate task is: Determine whether levels E<sub>1</sub>, E<sub>2</sub>, and E<sub>3</sub> do not affect or affect level E<sub>4</sub>?



**Figure 1.** Theoretical research model

Source: Authors

Based on the set theoretical research model and defined data, the following research hypotheses were formed in Table 3.:

**Table 3. Research hypotheses**

The null hypothesis		An alternative hypothesis	
<b>H<sub>01</sub></b>	Level of motivation does not affect level of women's entrepreneurship.	<b>H<sub>alt1</sub></b>	Level of motivation affects level of women's entrepreneurship.
<b>H<sub>02</sub></b>	Communication level does not affect the level of women's entrepreneurship level.	<b>H<sub>alt2</sub></b>	Communication level, affects level of women's entrepreneurship.
<b>H<sub>03</sub></b>	Education level does not affect level of women's entrepreneurship.	<b>H<sub>alt3</sub></b>	Education level, affects level of women's entrepreneurship.
<b>H<sub>0</sub></b>	Levels of motivation, communication and education do not affect level of women's entrepreneurship.	<b>H<sub>Alt</sub></b>	The levels of motivation, communication, and education affect the level of women's entrepreneurship.

Source: Authors

## CORRELATION AND REGRESSION ANALYSIS OF THE MODEL

Based on the theoretical model from Figure 1., for single linear dependencies, statistical significance ratings of partial influences of independent elements:  $E_1$ ,  $E_2$ , and  $E_3$  on dependent element  $E_4$  were given. In Table 4., interpretations are given for (linear regression equations, coefficients of determination, analysis of variances, and correlation coefficients).

**Table 4. Data from regression analyses**

Independent elements	Regression equation	RSquare %	ANOVA	Correlation
<b>E<sub>1</sub></b>	$E_4 = 0.6551629 + 0.7875423 \cdot E_1$	63.48	[F(1,318)=552.7782, p<0.0001]	0.796749
<b>E<sub>2</sub></b>	$E_4 = 2.3290335 + 0.4439738 \cdot E_2$	29.58	[F(1,318)=133.6019, p<0.0001]	0.543912
<b>E<sub>3</sub></b>	$E_4 = 1.3635145 + 0.6478292 \cdot E_3$	50.08	[F(1,318)=319.1200, p<0.0001]	0.707728

Source: Authors

Based on the obtained data from the previous table, we can say that element  $E_4$  can be explained by element  $E_1$  at 63.48%, element  $E_2$  at 29.58%, and element  $E_3$  at 50.08%. The correlation between elements  $E_1$  and  $E_4$  is strongly positive and amounts to 0.796749, and between elements  $E_2$  and  $E_4$  it is moderately strong positive and amounts to 0.543912, and between elements  $E_3$  and  $E_4$ , it is moderately strongly positive and amounts to 0.707728. As element  $E_1$  grows, element  $E_4$  grows strongly, as element  $E_2$  grows, element  $E_4$  grows moderately and as element  $E_3$  grows, element  $E_4$  grows moderately strongly. Alternative hypotheses were confirmed, namely: **Level of motivation affects level of women's entrepreneurship, Communication level, affects level of women's entrepreneurship and Education level, affects level of women's entrepreneurship.**

In Appendix 1. on (Figure 1. a & b) standardized and non-standardized values for elements of models  $E_1$  and  $E_4$  are given, in (Figure 2. a & b) standardized and non-standardized values for elements of models  $E_2$  and  $E_4$  are given, and standardized and non-standardized values for the elements of models  $E_3$  and  $E_4$  are given in (Figure 3. a & b.) Graphs of linear regressions resulting from the previously explained analysis are given in Figure 3.

Based on the theoretical system model from Figure 1., in Table 5, for multiple linear dependence, interpretations of the influence of independent elements are given:  $E_1, E_2,$  and  $E_3$  on the dependent element  $E_4$  (multiple linear regression equation, multiple coefficients of determination, variance analysis, and multiple correlation coefficient).

Based on the obtained data, we can say that the element  $E_4$  through the elements:  $E_1, E_2,$  and  $E_3$  can explain with 75.45%. Multiple correlation coefficients between elements:  $E_1, E_2,$  and  $E_3$  according to element  $E_4$  are 0.898122 and it is strongly positive. The arrangement of the influence of independent elements by importance according to the dependent element  $E_4$  follows that: element  $E_1$  is 0.544106 and it has the most influence, then element  $E_3$  is 0.293559 it has a little less influence, and element  $E_2$  is 0.208282 it has the least influence. As the elements:  $E_1, E_2,$  and  $E_3$  grow, so does the element  $E_4$ . The alternative hypothesis was confirmed, that: **The levels of motivation, communication, and education affect the level of women's entrepreneurship.**

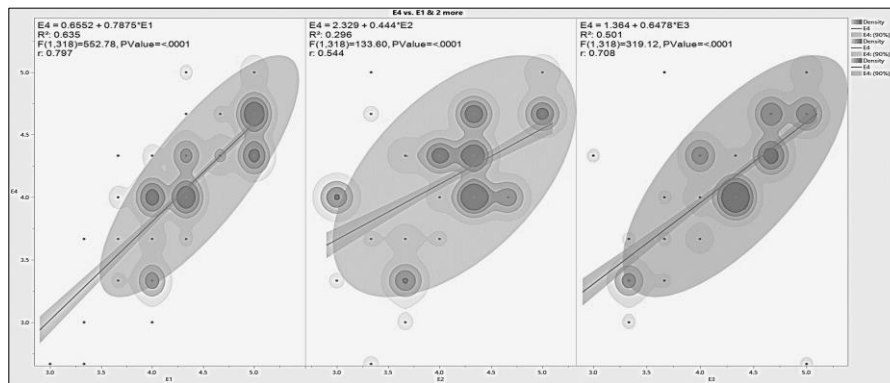


Figure 2. Graphs of regression equations for elements:  $E_1$  &  $E_4, E_2$  &  $E_4,$  and  $E_3$  &  $E_4$   
Source: Authors

Table 5. Data of multiple regression analysis

Independent elements	Regression equation	RSquare %	ANOVA	Correlation
$E_1, E_2$ & $E_3$	$E_4 = -0.098777 + 0.5378181 \cdot E_1 + 0.1700125 \cdot E_2 + 0.2687133 \cdot E_3$	75.45	[F(3,316)=323.8324, p<0.0001]	0.868655

Source: Authors

The graph of the multiple linear regression resulting from the previously explained analysis (table 5) is given in Figure 3.

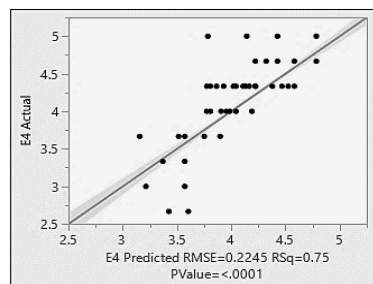


Figure 3. Graph of multiple regression equation for elements:  $E_1, E_2, E_3$  &  $E_4$   
Source: Authors

Standardized and non-standardized values for elements:  $E_1, E_2, E_3$  &  $E_4$  are given in Appendix 2. in (Figures 4. a & b).

## CONCLUSION

The level of development of entrepreneurship is constantly increasing at the global level due to the growth in the level of education, the level of business skills, and the increase in job insecurity. Starting your own business has emerged as one of the options for enterprising people. In recent years, female entrepreneurship has been the main driver for the creation, management, and growth of companies, and therefore for economic growth.

Women's entrepreneurship makes a significant contribution to the world economy, especially in low- and middle-income countries. It is a fact that the development of female entrepreneurship creates conditions for the creation of new jobs, which at the same time enables economic development and the development of society as a whole.

The conducted research showed that the motivation and education of women have the greatest influence on the development of female entrepreneurship.

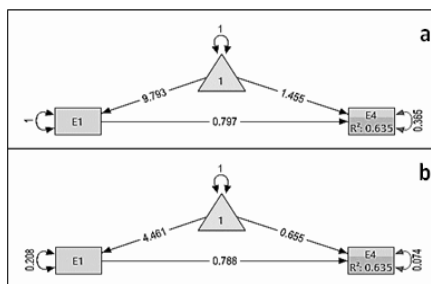
## REFERENCES

- [1] Nikodijević M. (2021). "Implications and challenges of using driver-based budgeting in contemporary business environment" *Trendovi u poslovanju*, vol. 9, iss. 1, pp. 49-57
- [2] Mukha Victoria N. & Klochko Elena N. (2021). "The impact of ethnic entrepreneurship on the innovative development of the economic space of a polyethnic region" *International Review*, iss. 3-4, pp. 15-20
- [3] Radović Marković M., Salamzadeh A. & Vujičić S. (2019). Selection of organization models and creation of competences of the employed people for the sake of competitiveness growth in global business environment, *International Review*, Faculty of Business, Economics and Entrepreneurship, Belgrade, br. 1-2, str. 64-71.
- [4] Naeini A. B., Mosayebi A. & Mohajerani N. (2019). A hybrid model of competitive advantage based on Bourdieu capital theory and competitive intelligence using fuzzy Delphi and ISM-Gray DEMATEL (study of Iranian food industry), *International Review*, ISSN 2217- 9739, No. 1-2, Faculty of Business, Economics and Entrepreneurship, pp. 21-35.
- [5] Hisrich Robert D., & Peters M. (2002). *Entrepreneurship*, McGraw-Hill Companies Inc.
- [6] Stevenson, H.H. & Jarillo, J.C. (1990). A paradigm of entrepreneurship - entrepreneurial management. *Strategic Management Journal*, 11: 17-27
- [7] Šormaz G. (2021). "The importance of entrepreneurship and innovativeness for the economic development of the Republic of Serbia" *Trendovi u poslovanju*, vol. 9, iss. 2, pp. 30-39
- [8] Alkier M. (2021). „Women entrepreneurs in tourism of the Republic of Croatia: challenges and opportunities,„ *Bizinfo (Blace)* vol. 12, iss. 2, pp. 197-213
- [9] Zapalska A.M. & Brozik D. (2014). Female entrepreneurial businesses in tourism and hospitality industry in Poland. *Problems and Perspectives in Management*, 12(2) (17) (PDF) *Female entrepreneurial businesses in tourism and hospitality industry in Poland*. Available from: [https://www.researchgate.net/publication/287735361\\_Female\\_entrepreneurial\\_businesses\\_in\\_tourism\\_and\\_hospitality\\_industry\\_in\\_Poland](https://www.researchgate.net/publication/287735361_Female_entrepreneurial_businesses_in_tourism_and_hospitality_industry_in_Poland)
- [10] Vukmirović N. (2005). Women entrepreneurship development models, *Industrija*, vol. 33, iss. 4, pp. 1-18
- [11] Asher J. (2012). Female Entrepreneurship-An appropriate response to gender discrimination, *Journal of entrepreneurship, management and innovation (JEMI)* vol-8-issue-4-
- [12] Varghese, D. (2015). Influence of Education in the Augmentation of Women Entrepreneurship, *Journal of Entrepreneurship & Management*, Volume 4, Issue 2
- [13] Molina-López, M.M., Koller, M.R.T., Rubio-Andrés, M. & González-Pérez, S. (2021). Never Too Late to Learn: How Education Helps Female Entrepreneurs at Overcoming Barriers in the Digital Economy. *Sustainability* 2021, 13, 11037. [https:// DOI.org/10.3390/su131911037](https://DOI.org/10.3390/su131911037)
- [14] Cantú Cavada M., Bobek V. & Maček A. (2017). Motivation Factors for Female Entrepreneurship in Mexico. *Entrepreneurial Business and Economics Review*, 5(3), 133-148. <https://DOI.org/10.15678/EBER.2017.050307>

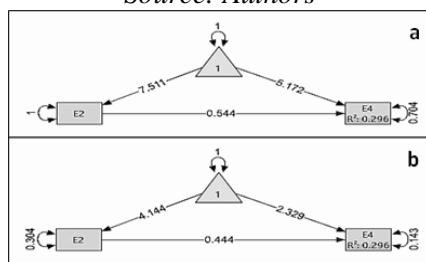
- [15] Sunil Kumar R. & Harold Andrew P. (2015). Motivating factors that influence women entrepreneurs, *International Journal of Research in Business Management (IMPACT: IJRBM)* ISSN (P): 2347-4572; ISSN (E): 2321-886X Vol. 6, Issue 4, Apr 2018, 65-80
- [16] Moses, C.L., Olokundun, M.A. & Mosunmola, A. (2014). Determining women entrepreneurial motivation: a review of theoretical models, *International Journal of Small Business and Entrepreneurship Research*. Vol.2, No.3, pp.43-54, September 2014. Published by European Centre for Research Training and Development UK
- [17] Kalyani, B.P.R. & Kumar, D.M. (2011). Motivational factors, entrepreneurship, and education: Study with reference to women in SMEs, *Far East Journal of Psychology and Business*, Vol 3 No 3 June 2011
- [18] Che Chang Chang & Fang-Tzu Chen (2018), *The Study of Influence Factor for Female Entrepreneurship*, ICOI-2018 The 2018 International Conference of Organizational Innovation Volume 2018
- [19] Thandabhani, M. (2020). Strategic communication for women entrepreneurs: a case study of India. *Insights into Regional Development*, 2(1), pp. 480-497. <10.9770/IRD.2020.2.1(7). <hal-02569369>
- [20] UNCTAD (2014). *Empowering Women Entrepreneurs through Information and Communications Technologies*, a practical guide
- [21] Zirdum G. & Cvjetanović V. (2017). Prepreke i mogućnosti razvoja ženskog poduzetništva u Republici Hrvatskoj. *Obrazovanje za poduzetništvo / Education for Entrepreneurship*, vol.7, NR
- [22] Oberman Peterka, S., Koprivnjak, T. & Zvijerac, M. (2016). Women and entrepreneurship in Croatia – stereotypes, impediments, incentives, 5th International Scientific Symposium *Economy of Eastern Croatia - Vision and Growth / Mašek Tonković, Anka (ur.)*, Osijek: Sveučilište J.J. Strossmayera u Osijeku, Ekonomski fakultet u Osijeku, 2016., p. 280. cited from: Hisrich, R. D., Peters, M. P., Shepherd, D.A. (2011: 63-65). *Poduzetništvo*. Zagreb: MATE
- [23] *Global Entrepreneurship Monitor - GEM, 2020/21 Women's Entrepreneurship Report: Thriving through Crisis*, <https://gemconsortium.org/reports/womens-entrepreneurship>, downloaded 18.11.2021.



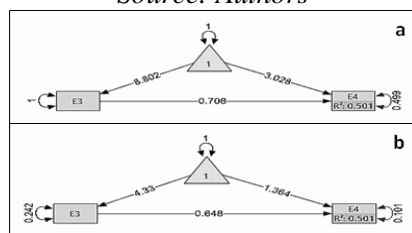
**Appendix 1.**



**Figure 1. a & b Standardized and non-standardized values for elements:  $E_1$  &  $E_4$**   
Source: Authors

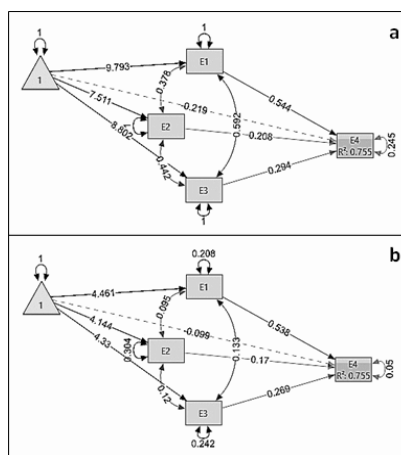


**Figure 2. a & b Standardized and non-standardized values for elements:  $E_2$  &  $E_4$**   
Source: Authors



**Figure 3. a & b Standardized and unstandardized values for elements:  $E_3$  &  $E_4$**   
Source: Authors

**Appendix 2.**



**Figure 4. a & b Standardized and unstandardized values for elements:  $E_1, E_2, E_3$  &  $E_4$**   
Source: Authors

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