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In the first chapter we present *Failure prediction of road transportation firms: evidence from six European countries*, by LUKASON, Oliver & SALMAR, Ott, with adscription in the University of Tartu, As a next article we present, *The role of moral intelligence in promoting organizational agility during crisis situations with regard to the mediating role of service quality provision*, by, PASHAEI, Kian & SHIRAZIAN, Zahra, with adscription in the Islamic Azad University, as a next article we present, *Financial inequality: the relationship between consumer taxes and social programs in the Argentine Republic in the period 2015-2019*, REZZOAGLI, Luciano & GUTIERREZ-ALVARADO, Rebeca, with adscription in the Universidad Nacional del Litoral, as the next article we present, *Radical youth communities in the virtual space*, by IVANOV, Andrey Valeryevich & SIRYUKOVA, Yana Alexeevna, with adscription in the Kazan Federal University.

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## Failure prediction of road transportation firms: evidence from six European countries

## Predicción de la quiebra en empresas de transporte por carretera: evidencia a través de seis países europeos

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### Abstract

This paper aims to create a failure prediction model for road transportation firms, as literature so far lacks inter-country evidence for this sector. Five financial ratios from Altman (1968) study are used for bankrupted and survived road transportation firms from six European countries with logistic regression as the method. The study indicates, that while all five financial ratios are significant in the inter-country prediction model, the accuracies of the model can vary through countries. The accuracies of single-country models do not differ a lot from the inter-country model accuracy, but in turn the significances of predictors can substantially vary through countries.

**Road transportation firms, European countries, Failure prediction, Financial ratios**

### Resumen

El objetivo de este artículo es crear un modelo de predicción de quiebra para las empresas de transporte por carretera, ya que hasta la fecha la revisión de la literatura muestra que no hay evidencia internacional para este sector. Se han utilizado cinco ratios financieros del estudio de Altman (1968) para empresas quebradas y sanas del sector transporte por carretera de seis países europeos, siendo la regresión logística la metodología empleada. El estudio indica que, si bien los cinco ratios financieros son significativos en el modelo de predicción internacional, las precisiones del modelo pueden variar de un país a otro. Las precisiones de los modelos de un solo país no difieren mucho de la precisión del modelo internacional, pero a su vez la importancia de los predictores puede variar sustancialmente de un país a otro.

**Empresas de transporte por carretera, Países europeos, Predicción de quiebra, Ratios Financieros**

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## Introduction

Firm failure prediction is one of the main research areas in various literature streams, such as business, management, accounting and machine learning. Since the piloting multivariate study by Altman (1968), numerous prediction models have been composed and their amount is constantly growing. Financial ratios have been established as valuable predictors already fifty years ago and this fact has remained valid till today. Still, so far international comparative studies are scant in the failure prediction literature and only a few large-population inter-country studies are available (e.g. Laitinen and Suvas, 2013; Altman et al., 2017). While some sectors (e.g. manufacturing) have received considerable research attention, there is scant evidence available about others, such as transportation. The few published studies focusing on road transportation firms are single-country small-sample studies, and thus, a more generalized approach is needed.

Therefore, this paper aims to build an inter-country prediction model for road transportation firms. To justify the usefulness of the created model, its accuracy is being compared with single-country models based on the same input variables. In addition, the latter enables to draw a conclusion, whether the failure predictors of road transportation firms vary through countries and provide potential explanations to such variations. Thus, it is possible to contribute to the transportation management literature by outlining whether road transportation firms in different countries fail in the same way in the financial sense.

The paper is structured classically. The introductory part is followed by the review of literature, which focuses on the general achievements in the failure prediction literature as well as on transportation sector specific models. The data and method section describes the multi-country dataset used and the prediction method chosen. The results and discussion are consolidated into one section, which arguments over the results based on available knowledge from previous prediction models as well as provides a potential scientific explanation to the inter-country variation of prediction accuracies and predictors.

The study is summed up in the conclusive part, which also includes research limitations, implications and future research directions.

## Literature review

Failure prediction studies have relied on a variety of definitions of failure (see for them e.g. Cochran, 1981), but dominantly studies narrow the definition to permanent insolvency or bankruptcy (Balcaen and Ooghe, 2006). The usage of bankruptcy as the definition has several benefits over a more broader definition such as earning losses, as the exact time of event is known and it is (often) final (Lukason and Laitinen, 2016). Still, some international studies have considered a broader definition, such as liquidation irrespective of whether insolvency occurred or not (Altman et al., 2017). Still, using insolvent and non-insolvent firms simultaneously in the population could not be a suitable option, as voluntary liquidation could also be characteristic to firms without any (remarkable) financial problems.

The multivariate bankruptcy prediction studies exploiting financial ratios as predictors have emerged from the piloting study by Altman (1968). When originally discriminant analysis was preferred as the method, since Ohlson (1980) logistic regression has gained popularity, mostly because it has less statistical restrictions. Nowadays, the area is methodologically developing mostly in the machine learning domain, where a myriad of different methods and algorithms have been introduced (Kumar and Ravi, 2007; du Jardin, 2017). Still, the classical statistical methods hold some advantage when compared with machine learning, as they enable more vividly to bring out the importance (significance) of included predictors. In turn, the machine learning methods mostly perform by using a “black box” logic, in case of which it might not be possible to show the individual importance of predictors, and derived from that, not to compare the importance of these predictors through different models (e.g. country-specific models).

As predictor variables, financial ratios have been the most exploited in failure prediction research (e.g. Balcaen and Ooghe, 2006), while the application of non-financial variables (e.g. managerial characteristics, payment defaults, macroeconomic environment) remains in vast minority, probably because of data availability issues. Studies have reached varying results in respect to how valuable non-financial variables are in failure prediction, while there seems to be a consensus that they can provide at least some incremental value in combined models (Back, 2005; Ciampi, 2015; Iwanicz-Drozowska et al., 2016).

Dozens of different financial ratios have been applied in failure prediction (Kumar and Ravi, 2007), although during the development of the research area since Altman (1968), certain variables have systematically performed better than others. Such variables mostly portray liquidity, solidity, profitability and leverage (Lukason et al., 2016), which were also included in the Altman (1968) study. Specifically, the Altman (1968) study included five variables: annual profitability, accumulated profitability, liquidity, leverage and productivity (asset turnover). Although the initial variables from Altman (1968) study have sustained their popularity, their coefficients have (largely) varied through sectors and countries (see e.g. the Altman et al. (2017) study incorporating millions of European firms from different sectors). In Altman et al. (2017), the assets' productivity was dropped because of its industry specificity, but in a single industry context that variable could still be useful.

The few available multi-country studies based on large samples (e.g. Laitinen and Suvas, 2013; Altman et al., 2017) have indicated that the usage of the same variables in different countries could lead to (largely) varying classification accuracies and importance of the variables. This phenomenon has been explained by the dominance of different failure processes in countries (Lukason et al., 2016; Lukason and Laitinen, 2019). Namely, when in some countries firms mostly decline quickly and shortly before bankruptcy, then in others the decline process is observable during a longer time frame (Lukason and Laitinen, 2019). The latter phenomenon could be explained by varying content and implementation of insolvency laws (Gutierrez et al., 2012).

Several studies about the failure prediction of transportation firms can be found in the literature, while attention has been mostly paid on airline industry (e.g. Chow and Gritta, 1988; Davalos et al., 1999; Gudmundsson, 1999; Lu et al., 2015). Other sectors, such as railroad (e.g. Altman, 1973), water (e.g. Lozinskaia et al., 2017) and land transportation (e.g. Balina and Juszczyk, 2014) have received considerably less research attention. The common features of the previous studies are that they are mostly single country studies with relatively small samples, thus reducing the universality of conclusions. Generally, these studies have applied (at least some of) the variables initially included in the Altman (1968) study and their significance in case of transportation firms has been proven.

Therefore, this study aims to find out, how useful are the financial ratios from Altman (1968) model in predicting the failure of road transportation firms in different European countries. The latter aim also incorporates composing country-specific models and comparing, whether the significance of financial ratios in prediction models varies through countries.

### Data and method

The firm level data for this study originates from Bureau van Dijk Amadeus database, which includes financial information and statuses of firms from different European countries. Likewise with previous studies, firm is considered as failed, when it is insolvent. Therefore, firms with statuses "active insolvency proceedings" and "bankruptcy" are downloaded. Derived from the aim of the paper, only firms belonging to NACE Rev. 2 sector 4941 "Freight transport by roads" are considered. The preliminary screening of the failed firms' data reveals, that there are only six European countries, in case of which there are over 100 failed firms from the specific sector, in case of which all the necessary financial information is available. Thus, only these countries (Belgium, France, Hungary, Italy, Portugal, Romania) are kept in the analysis. Including countries with less than 100 observations makes the model's error from misclassifying a single failed company very large (i.e. >1%), and thus, it is not rational to include such countries.

There are many options for obtaining the information about non-failed firms. The methodologically most correct is to choose firms with “active” status irrespective of how well they perform. Concerning the group of non-failed firms, the most usual option in the literature has been to use a sample, often in (about) an equal size when compared with the failed ones. Thus, a random sample of active firms in these six countries is drawn from Amadeus database to match the size of the failed firms’ sample. Also, an additional random sample of survived firms is downloaded from Amadeus to further check the robustness of the first random sample.

Country	Test sample	Hold-out sample
Belgium	372	162
France	2702	1158
Hungary	306	132
Italy	946	406
Portugal	316	138
Romania	794	342
Total	5436	2338

**Table 1** Number of firms in test and hold-out samples by countries

Source: Own elaboration

The available observations are classically broken into two, where the first part represents the test sample for the model composition and the second part hold-out (control) sample for checking the model’s performance. The test sample includes 70% of the available observations and the hold-out sample respectively 30%. Table 1 tabulates the sample sizes by countries for the test and hold-out samples, whereas in each country the sample divides equally in between failed and non-failed firms.

As variables, the five financial ratios applied in the piloting Altman (1968) study are used. As the literature review indicated, these financial ratios are theoretically motivated, cover all the main financial dimensions, and have been frequently used in prediction models (including examples from other subsectors of the transportation sector). The coding and formulas of these ratios have been presented in Table 2. The failed firms’ annual reports originate from years 2012-2016 and the same period is used to obtain annual reports for the non-failed firms. In case of failed firms, the annual report closest to one year before insolvency date is used.

The latter provides that failed firms are as homogenous as possible in respect to what pre-insolvency period is viewed, as otherwise some reports might originate from a few months before insolvency and others several years before insolvency.

Dimension	Code	Formula
Liquidity	WCTA	Working capital (i.e. current assets - current liabilities) / total assets
Accumulated profitability	RETA	Retained earnings / total assets
Annual profitability	EBITTA	EBIT / total assets
Leverage	BVETD	Total equity / total debt
Productivity	OPRTA	Operating revenue / total assets

**Table 2** Coding and formulas of financial ratios used in the analysis

Source: Own elaboration

As the method for prediction models’ composition, the most widely used classical statistical analysis method for binary outcomes, i.e. logistic regression (LR), has been used. In LR, failed firms are coded with 1 and non-failed with 0, which has been the usual coding in relevant studies. First, the inter-country LR model is composed. As countries have different frequencies in the analysis, likewise with Altman et al. (2017), the frequencies of countries have been equalized by weighting each country out of six by:  $(1/6)/(\text{share of country's observations in the test sample})$ . In this way, each of the countries obtains exactly the same importance in the analysis. An alternative would be not to weigh the cases by countries, but in that occasion the content of French observations would dominate in the analysis and it would not be possible to compose an inter-country model. After the composition of inter-country weighted LR model, it is applied on the hold-out sample to provide out of test sample validation. Before LR analysis, the variables are winsorized, as financial ratios can usually obtain abnormal values altering the coefficients in LR.

In addition, after the composition of inter-country model, six separate country specific models are composed. In case of them, weighting is not important, as each model includes observations from a single country. Likewise with the inter-country model, each of them has been validated on the specific country's hold-out sample. This enables further comparison of the accuracies of a universal inter-country model and the separate country-specific models. Also, the (in)significances of variables in the inter-country and country-specific models are compared.

## Results and discussion

First, the descriptive statistics of the applied five variables are outlined (see Table 3). The means of financial ratios through two groups indicate that failed and non-failed firms significantly differ in respect to liquidity, annual and accumulated profitability, leverage and productivity (see Table 3 notes section). While the means of all other ratios except for productivity also differ significantly through all studied countries, then in some countries (e.g. Portugal) the productivity ratio OPRTA does not differ. In addition, the means and medians indicate that the ratios have theoretically correct values. Namely, in respect to mean values before insolvency, failed firms indicate lower liquidity (current liabilities exceeding current assets), negative annual and accumulated profitability, excessive leverage and lower productivity. Therefore, already the descriptive analysis presented in Table 3 indicates the potential of these ratios to discriminate in between failed and non-failed firms.

The analysis is followed by presenting univariate prediction abilities of each of the financial ratios in the studied six countries separately and in the inter-country sample. The results in Table 4 are obtained by composing univariate LR models, and also, the ranking in each country is presented by providing the highest rank to the ratio enabling the best discrimination. The univariate prediction abilities remain on an average level, indicating that failed and non-failed firms are distinguishable, but not very precisely, when individual ratios are applied.

Failure status	Statistic	WCTA	RETA	EBITTA	BVETD	OPRTA
Non-failed (N = 2718)	Median	0.20	0.23	0.06	0.48	2.10
	Mean	0.19	0.23	0.07	0.73	2.26
	Std.Dev.	0.30	0.28	0.13	0.78	1.03
	Min.	-3.00	-1.00	-1.10	-0.92	0.00
	Max.	1.00	0.96	2.09	3.00	5.00
Failed (N = 2718)	Median	-0.08	-0.05	0.00	0.04	1.94
	Mean	-0.34	-0.22	-0.16	0.09	2.09
	Std.Dev.	0.88	0.47	0.61	0.67	1.44
	Min.	-3.00	-1.00	-3.00	-1.00	0.00
	Max.	2.40	1.00	3.00	3.00	5.00
Total (N = 5436)	Median	0.08	0.09	0.04	0.23	2.03
	Mean	-0.08	0.01	-0.04	0.41	2.18
	Std.Dev.	0.71	0.45	0.46	0.80	1.25
	Min.	-3.00	-1.00	-3.00	-1.00	0.00
	Max.	2.40	1.00	3.00	3.00	5.00

Note: Welch ANOVA test p-values < 0.0001 when comparing the means of all five ratios in between two groups (failed and non-failed). When individual countries are considered, the Welch ANOVA test p-values < 0.0001 for all ratios in all countries, except for OPRTA, which has p-value 0.013 in Hungary and 0.799 in Portugal.

**Table 3** Descriptive statistics of financial ratios applied  
Source: Own elaboration

In line with the probabilistic theory of bankruptcy by Scott (1981), annual and accumulated profitability are the best predictors, although this result varies through countries. The liquidity and leverage ratios rank lower, which lends support to the finding in Lukason and Laitinen (2019) about the lesser usefulness of these variables in failure prediction when compared with profitability. Productivity clearly holds the last position among the rankings and due to low accuracies (resembling in many countries almost a “coin toss” situation), the individual usage of this variable in failure prediction is highly questionable. Indeed, this variable has been dropped from the modifications of Altman (1968) model, and thus, the result can be considered as expected.

Ratio accuracy or rank & country	WCTA	RETA	EBITTA	BVETD	OPRTA
RA Belgium	61.6%	67.2%	60.8%	60.5%	62.1%
RR Belgium	3	1	4	5	2
RA France	68.2%	75.9%	61.0%	72.0%	54.9%
RR France	3	1	4	2	5
RA Hungary	71.6%	77.1%	72.9%	70.3%	57.5%
RR Hungary	3	1	2	4	5
RA Italy	74.2%	74.6%	76.1%	74.0%	65.9%
RR Italy	3	2	1	4	5
RA Portugal	71.5%	70.9%	72.2%	71.2%	52.5%
RR Portugal	2	4	1	3	5
RA Romania	70.5%	77.6%	76.8%	73.7%	68.3%
RR Romania	4	1	2	3	5
Median RR	3	1	2	4	5

Note: RA – ratio accuracy. RR – ratio rank. The ratio ranks for five financial ratios are notified as: “1” – the ratio with highest univariate accuracy and “5” – the ratio with lowest univariate accuracy. The “median RR” is calculated as the median rank of six country ranks.

**Table 4** Univariate accuracies of ratios in different countries and their ranking based on accuracies  
Source: Own elaboration

Variable	B	S.E.	Sig.	Exp(B)
WCTA	-0.577	0.056	0.000	0.562
RETA	-2.109	0.076	0.000	0.121
EBITTA	-0.753	0.072	0.000	0.471
BVETD	-0.130	0.033	0.000	0.878
OPRTA	-0.432	0.017	0.000	0.649
Constant	0.901	0.040	0.000	2.461

Note: Model R-squared 0.385. Mean variance inflation factor 2.19, indicating no issues with multicollinearity.

**Table 5** Inter-country logistic regression failure prediction model

Source: Own elaboration

Country	Test sample			Control sample		
	NF	F	All	NF	F	All
Belgium	72.0	67.7	69.9	67.9	75.3	71.6
France	94.5	44.3	69.4	95.0	42.1	68.6
Hungary	89.5	60.8	75.2	92.4	62.1	77.3
Italy	79.5	84.4	81.9	74.9	80.8	77.8
Portugal	70.3	77.8	74.1	69.6	69.6	69.6
Romania	81.4	81.4	81.4	70.8	77.8	74.3
Mean	81.2	69.4	75.3	78.4	68.0	73.2

Note: NF – non-failed, F – failed.

**Table 6** Inter-country logistic regression model accuracies in six countries' test and control samples (%)

Source: Own elaboration

In Table 5, the results of an inter-country failure prediction model are presented, with model accuracies in Table 6. All applied five financial ratios are significant in predicting the future failure of firms, with coefficients having theoretically correct signs, i.e. the decrease in ratio value making failure more likely. The accuracy of the model on test and control sample remains on an average level, around a quarter of firms misclassified. The accuracy is higher for non-failed firms, while being modest in the failed firms' group. This indicates that many of the failed firms are not distinguishable from their non-failed counterparts and they probably follow an acute failure process, as proposed in Lukason and Laitinen (2019). The latter means that signs of future failure are not signaled through the annual reports available one year before failure and the critical events for these firms occur very shortly before insolvency emerges. Indeed, for the mostly SME population analyzed, such finding is not surprising, as in multiple previous studies such phenomenon has been documented (see e.g. Laitinen et al., 2014; Lukason et al., 2016).

There is around 10 percentage points variation in the accuracies through different countries, when the control sample is considered. In some countries (Belgium, Italy, Portugal, Romania) the accuracies for failed and non-failed firms are quite similar, while in others (France, Hungary) there is a substantial difference in favor of the non-failed group. Portuguese and Italian test samples are the only ones in which the accuracy for failed firms exceeds that of non-failed.

Country	Test sample			Control sample		
	NF	F	All	NF	F	All
Belgium	76.9	68.8	72.8	70.4	75.3	72.8
France	79.6	72.8	76.2	74.8	72.9	73.8
Hungary	86.9	66.0	76.5	95.5	72.7	84.1
Italy	86.5	79.9	83.2	84.2	76.8	80.5
Portugal	79.7	72.8	76.3	78.3	60.9	69.6
Romania	86.9	80.9	83.9	76.0	73.7	74.9

Note: NF – non-failed, F – failed.

**Table 7** Country-specific logistic regression models' accuracies in six countries' test and control samples (%)

Source: Own elaboration

The country-specific LR models documented in Table 7 indicate that in several countries (France, Hungary, Italy) the composition of a country-specific model leads to a few percentage points higher accuracy in classification, while in others (Belgium, Portugal, Romania) the accuracies are quite similar to Table 6. Therefore, failed road transportation firms in different countries are somewhat different, but not substantially, the latter justifying the usage of a universal model.

Country	WCTA	RETA	EBITTA	BVETD	OPRTA
Belgium		+			+
France		+	+		+
Hungary		+			
Italy	+	+	+	+	+
Portugal	+	+			+
Romania	+	+	+		+

Note: "+" indicates that the specific financial ratio is significant at  $p < 0.05$  in the country-specific model.

**Table 8** Variables significant in country-specific models

Source: Own elaboration

The variables significant in country-specific models documented in Table 8 provide insights to the failure processes the transportation firms in these countries follow. In all countries, accumulated profitability (RETA) and productivity (OPRTA; except for Hungary) are significant predictors. Thus, some proportion of firms in all countries have lost their competitive advantage and probably witnessed multiple consecutive years of negative profitability. Such firm type has been proposed in previous studies, for instance as “lingers” in D’Aveni (1989) or “apathetic firms” in Ooghe and de Prijcker (2008). The latter firms could have been liquidated (long) before the start of insolvency proceedings and probably the legislative framework of resolving insolvencies does not guarantee speedy elimination of inefficient firms from the market. Annual profitability (EBITTA) and liquidity (WCTA) are significant predictors in half of the countries, while leverage (BVETD) only in one country. Based on Laitinen’s (1995) concept of different bankruptcy processes, road transportation firms from Belgium, France and Hungary seem to be subject to solidity problems only one year before failure, while in Italy, Portugal and Romania, liquidity and solidity problems both seem to matter.

For comparative purposes, we used the most robust international prediction model by Altman et al. (2017), which includes all the financial ratios applied in this study except for OPRTA. Namely, when using the second model from that study, the following accuracies are obtained: Belgium 63.5%, France 70.0%, Hungary 78.8%, Italy 75.5%, Portugal 71.7%, Romania 70.2%. The accuracies mostly remain lower when compared with the ones obtained in this study (see Table 6 and 7). Thus, peculiarities of the transportation sector play a certain role and a multi-country multi-sector model is not as useful as a sector-specific in predicting the demise of firms. Also, when an additional non-failed firms’ sample is used, then the significant variables in Tables 5 and 8 are not altered, and thus, there is no non-failed firms’ sample selection bias in the study. The latter is not an issue for failed firms, as available whole population was applied.

## Conclusion

This paper aimed to create an inter-country failure prediction model for road transportation firms from different European countries. All failed (i.e. bankrupted) road transportation firms from six European countries and comparative sample of non-failed (i.e. survived) firms from the same countries were applied. As variables, five financial ratios originating from Altman (1968) study, and as the method, logistic regression were applied.

The results indicate that all five financial ratios from Altman (1968) study are significant predictors of road transportation firms’ failure. The accuracy of the prediction model (for both, test and hold-out sample) can vary through countries. The country-specific prediction models have similar accuracies as the inter-country model, although the significances of specific predictors can vary through countries.

As a practical implication, credit analysts can account that failure of road transportation firms is predictable with an average accuracy with classical financial ratios and logistic regression analysis. Thus, for many firms from this sector, problems can arise shortly before bankruptcy is declared and variables other than financial ratios are needed to enhance prediction accuracies.

The paper can be developed further by using a larger population of European countries, a longer time horizon of financial performance before bankruptcy is declared, or variables other than financial ratios. Concerning the latter, managerial characteristics or payment defaults could be beneficial. In addition, the usage of a longer time horizon and more diversified variables would enable to test a complex theory of why and how road transportation firms fail.

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## The role of moral intelligence in promoting organizational agility during crisis situations with regard to the mediating role of service quality provision

### El papel de la inteligencia moral en la promoción de la agilidad organizativa durante situaciones de crisis con respecto al papel mediador de la prestación de calidad del servicio

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#### Abstract

Moral intelligence introduces a new authority tool to the organizations' managers so that it can be used in the organizations to improve organizational agility and promote the quality of services in crisis situations. This study was applied in terms of its objectives, and a descriptive survey in terms of data collection method. The statistical population of the study consisted of the employees of the Red Crescent Organization in Hamadan province (N=200). According to Morgan's Table, the sample size was estimated to be 132. The data collection instrument was a questionnaire. Content validity and confirmatory factor analysis were used to assess the validity, Cronbach's alpha coefficient was calculated to estimate the reliability, and structural equation modeling was run in Smart PLS software to analyze the collected data. The results indicated that moral intelligence had a positive and significant effect on the improvement of organizational agility in the Red Crescent Organization of Hamedan province. Additionally, moral intelligence had a positive and significant impact on the service quality provision in the Red Crescent Organization of Hamedan province. Service quality provision also had a positive and significant effect on the promotion of organizational agility in Red Crescent Organization of Hamedan province.

**Moral intelligence, Organizational agility, Service quality provision**

#### Resumen

La inteligencia moral introduce una nueva herramienta de autoridad a los gerentes de las organizaciones para que pueda ser utilizada en las organizaciones para mejorar la agilidad organizacional y promover la calidad de los servicios en situaciones de crisis. Este estudio se aplicó en términos de sus objetivos, y una encuesta descriptiva en términos de método de recopilación de datos. La población estadística del estudio estaba formada por los empleados de la Organización de la Media Luna Roja en la provincia de Hamadan (N=200). Según Morgan's Table, el tamaño de la muestra se estimó en 132. El instrumento de recopilación de datos era un cuestionario. La validez del contenido y el análisis de factores confirmatorios se utilizaron para evaluar la validez, se calculó el coeficiente alfa de Cronbach para estimar la fiabilidad, y el modelado de ecuaciones estructurales se ejecutó en el software Smart PLS para analizar los datos recopilados. Los resultados indicaron que la inteligencia moral tuvo un efecto positivo y significativo en la mejora de la agilidad organizativa en la Organización de la Media Luna Roja de la provincia de Hamedan. Además, la inteligencia moral tuvo un impacto positivo y significativo en la prestación de calidad de los servicios en la Organización de la Media Luna Roja de la provincia de Hamedan. La prestación de calidad de los servicios también tuvo un efecto positivo y significativo en la promoción de la agilidad organizativa en la Organización de la Media Luna Roja de la provincia de Hamedan.

**Inteligencia moral, agilidad organizativa, prestación de calidad del servicio**

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## Introduction

Moral intelligence basically refers to a capacity to understand right from wrong. In other words, moral intelligence is having firm moral beliefs and act accordingly (Siadat et al., 2008). Moral intelligence is the capacity to apply the universal morality principles in the ethics, goals, and interactions of a person based on a rule (Lennick & Kiel, 2007). To put it in other words, a person with moral intelligence is the one possessing strong and firm ethical beliefs and the ability to act accordingly as such the person behaves in the right and respectful manner (Khaleqi & Chenari, 2015). Agility enhances the organization's ability to deliver high-quality products and services and is therefore an important factor affecting the organization's effectiveness. Agility represents an organization's capability to perceive and anticipate changes in the workplace. Such an organization must be able to recognize environmental changes and regard them as growth and prosperity factors (Sharifi & Zhang, 2006). Many organizations are inclined to approaches such as virtual organization and virtual teams to improve their organizational agility and develop globally. Agility may sometimes be the integration of processes, members, and features of an organization using advanced technologies (Bottani, 2009). One of the main reasons leading to an increased application of organizational agility process is environmental change and its impact on the organization's knowledge and performance. Organizations, and in particular the Red Crescent Organization of Hamedan Province, are supposed to rely on their competitive advantage to succeed. To this end, organizational agility strategy will be a solution letting the organization use the resources, facilities, and expertise of other organizations without any ownership right (Bahadori & Habibi, 2016). Quality of services is one of the main critical issues and one of the most effective tools in creating competitive advantage, leading to a high level of service quality, satisfaction, and customer loyalty (Parasuraman & Zeithaml, 2002).

SERVQUAL and Kano models are widely used in service quality assessment (Wu & Lin, 2012). Awareness of the concept 'service quality' and efforts to promote such a concept lead to the provision of quality services. Enhancing the service quality could promote customer satisfaction as well (Wu & Lin, 2012).

Hence the researcher seeks to introduce a new authority tool to the managers of the Red Crescent Organization of Hamedan Province with regard to moral intelligence, so that it can be used in this organization to improve the organizational agility and provide high-quality services. Due to the nature and structure of the organization, improving and enhancing moral intelligence and providing high quality services in the Red Crescent Organization of Hamedan province seems to be effective in increasing the level of organizational agility in this organization and to be of great help to staff in order to improve the quality of services. One of the significant issues to address in this regard is as follows: How much work is undertaken in this organization in terms of moral intelligence and service quality provision? Considering all the aforementioned assumptions, this study aimed to detect whether moral intelligence has a positive and significant effect on the improvement of organizational agility in crisis situations with regard to the mediating role of the service quality provision (Case study: Red Crescent organization of Hamedan province).

## Literature and Research Background

### Moral Intelligence

Borba (2005) defines moral intelligence as being capable of distinguishing right from wrong, having moral certainties, and acting in accordance with them in order to behave in a proper and honorable manner. Moral intelligence directs all other types of human intelligences toward undertaking valuable works (Beheshti Far et al., 2011: 3).

According to Borba (2005), the moral intelligence principles are as follows:

Sympathy, consciousness, self-control, attention and respect, kindness, tolerance, and equity.

*Moral intelligence principles from Lennick and Kiel's (2005) perspective:*

1. Principle of Integrity: It means creating harmony between individuals' beliefs and actions. In fact, it is doing what we know is right and telling the truth.
2. Principle of Responsibility: It refers to accepting actions and their consequences, as well as errors and failures.

3. Principle of Compassion: It means to consider the others and their reciprocal influences.
4. Principle of Forgiveness: It encompasses an awareness of imperfections and mistakes and forgiving oneself and others.

### Organizational Agility

In today's world, more emphasis is placed on the ability to adapt to changes occurring in the business environment, and agile manufacturing is an approach to understand customer and market needs, which literally is a step forward to create new meanings for better performance and success in business, and operationally is also a strategic approach in manufacturing with regard to the new business environment. Responding to changes and considering their benefits through strategic use of production and management methods and tools are the underlying concepts of agile manufacturing (Levy et al., 2009).

Agility refers to the capacity to survive and progress in an environment filled with constant and unpredictable changes (Levy et al., 2009). Agility is, in fact, a new paradigm for engineering competitive firms. The need for this new paradigm is based on an increase in the rate of changes in the environment that makes firms have proactive responses to the changes. Markets and customers demand for inexpensive products tailored to their needs and quick access to these products (Cao, 2005). Agility constantly focuses on the personnel and organization's performance, the value of products and services, and the constant changes in the opportunities caused by attracting customers and requires constant preparation to face fundamental and superficial changes as the agile companies are always prepared to learn anything new which boosts their profitability through using new opportunities (Cao, 2005).

Accordingly, successful agile rivals not only must recognize their markets, manufacturing lines, competencies, and current customers, but also should identify their potential future customers and markets. This would lead to strategic plans to gain new competencies, develop new manufacturing lines, and deal with new markets. Conceptual concepts of agile competition are associated with competitive grounds that operate specifically within a company.

Agile companies are subject to aggressive changes. For the agile competitors, changes and uncertainties are the source of rehabilitating new opportunities based on permanent successful methods; therefore, agility relies on human initiatives, skills, knowledge, and access to information in order to cope with changes with no previous background. An agile organization has administrative processes and a type of organizational structure to rapidly and smoothly transfer these initiatives to the core of customer business activities and acts aggressively in creating opportunities for profit-making and growth (Sharifi et al., 2006).

Agile competitors accelerate changes and create new markets and new customers, which are beyond their understanding, through paths on which the market and customer needs appear. Although agility allows the company to react much more quickly than before, the agile competitors' strength is in anticipating customer needs and leading the creation of new markets through continuous innovation. Agility is a comprehensive response to a new competitive environment, being formed by forces reducing the dominance of the mass production system (Sharifi et al., 2006).

### Service Quality Provision

- Quality is the availability of services or goods for the user and requires the design quality, compliance, access, and suitability of the service delivery location.
- Quality has no definition but what the customer really expects. In other words, a quality product meets the customer's demands and needs. Quality should be defined as the compliance between product and customer needs (Izogo & Ogba, 2015).

Service quality is recognized as one of the most important and critical issues and one of the most effective tools to create competitive advantage and improve organizational performance. Hofman and Batson (1997) argued that a high quality services cause customer satisfaction and loyalty, which in turn would lead to increased market share and profitability. Cristian and Couch's (2010) recent study confirms the impact of service quality on business achievements.

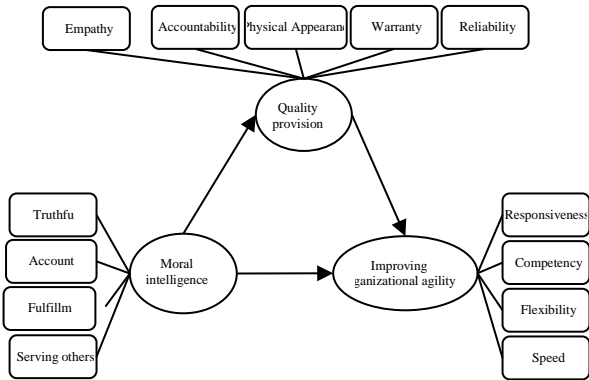
Service quality is defined based on the customers' expectations and perceptions of the service. The expected service is the ideal service representing the level of service that the customer hopes to receive, and customers' perceptions represent the customer's interpretation of the quality of the received service. The customer often evaluates the service quality by comparing the received service (customer perceptions) and the expected service (customer expectations). Improving service quality is aimed at minimizing the gap between the customer expectations and perceptions.

Manager's commitment to service quality is defined as the conscious selection of quality for effective and strategic operation in the organization and integration with activities such as visible qualified leadership and resources for the adoption and implementation of quality projects. Manager's commitment to services leads to employees' satisfaction, and this emotional response affects their service behaviors. In other words, the manager's commitment to services affects employees' occupational attitude and, ultimately, organizational effectiveness. When the managers behave their employees well, the employees will also behave their customers well. Employees feel more committed to the organization when they feel the organization is committed to them (Navah et al., 2016).

### Research Background:

- Alizadeh (2018) showed that moral intelligence and emotional intelligence could predict about 321% of the variance in ethical behaviors.
- Bahadori and Habibi (2016) concluded that there was a positive and significant relationship between managers' morale, organizational self-esteem, and organizational agility with managers' job satisfaction.
- Bidokhti et al. (2016) claimed that organizational citizenship behavior and organizational entrepreneurship had a positive and significant effect on organizational commitment, and that organizational commitment had a positive and significant influence on organizational agility.
- Yaldachi (2016) confirmed positive and significant effect of service tangibility, service reliability, service providers' accountability, and service trustworthiness on customer satisfaction.
- Elahi Nezhad et al. (2016) suggested that service quality had a positive and significant effect on customer loyalty. Ahmadi and Asgari Dehabadi (2015) found a positive and significant correlation between service quality with satisfaction, trust, and loyalty among customers.
- Dowlat Shah et al. (2017) concluded that there was a positive and significant correlation between empowerment with organizational agility and organizational entrepreneurship.
- Izogo and Ogba (2015) investigated the relationship among service quality components in the SERVQUAL model and its impact on customer satisfaction and loyalty. The results of their research showed a significant relationship among the concerned variables.
- Kashif et al. (2015) also reported a positive and significant relationship between customer satisfaction and the quality of banking services with customer loyalty.
- Gabriel et al. (2015) concluded that there was a positive and significant relationship between organizational agility and knowledge management processes.
- Sherehiy and Karwowski (2014) noticed a positive and significant relationship between agility development and labor force. Moreover, autonomy and agility in the workplace was reported as one of the important factors affecting the success of the workforce.
- According to the SERVQUAL model, Maja et al. (2014) conducted a research on the quality of services provided at the University of Bosnia and found a significant difference/gap between students' perceptions and expectations. The gap was positive with regard to empathy and accountability dimensions, indicating high quality of services in these two dimensions.
- Hioun and Kim (2011) investigated the relationship between service orientation, service quality, customer satisfaction, and customer loyalty in department restaurants located in Seoul, South Korea. The findings of their research showed that the impacts of service quality on satisfaction and satisfaction on customer loyalty were greater than the other impact coefficients.

**Operational Model of the Study**



**Figure 1** Operational Research Model

**Research Hypotheses**

*First hypothesis*

Moral intelligence has a positive and significant effect on improving organizational agility in crisis situations with regard to the mediating role of service quality provision in the Red Crescent Organization of Hamedan Province.

*Second hypothesis*

Moral intelligence has a positive and significant effect on improving organizational agility in the Red Crescent Organization of Hamedan Province.

*Third hypothesis*

Moral intelligence has a positive and significant effect on service quality provision in the Red Crescent Organization of Hamedan Province.

*Fourth hypothesis*

Service quality provision has a positive and significant effect on improving organizational agility in Red Crescent Organization of Hamedan province.

**Research Methodology**

This study was applied in terms of its objectives and a descriptive survey in terms of data collection method. Moreover, the research was quantitative in nature since a questionnaire was used to collect and the data analysis was performed by using the structural equation modeling technique. The statistical population of the study consisted of the employees of the Red Crescent Organization in Hamadan province (N=200). According to Morgan’s Table, the sample size was estimated to be 132.

Furthermore, stratified sampling method was adopted to select the participants. Standard questionnaires were also utilized to collect the required data. The first questionnaire was moral intelligence scale developed by Lennick and Kiel (2007) and consisted of eight items on four dimensions: (1) truthfulness; (2) accountability; (3) fulfillment of a promise; and (4) serving others.

The second questionnaire on organizational agility was developed by Sharifi and Zhang (2006). The questionnaire consists of 12 items on four dimensions: (1) responsiveness; (2) competency; (3) flexibility; and (4) speed. The third questionnaire was Parasuraman and Zeithaml’s (2002) service quality provision scale and encompassed 10 questions on five dimensions: (1) reliability; (2) warranty; (3) physical appearance; (4) accountability; and (5) empathy. Although the questionnaires used in the present study were standardized and their validity was confirmed, the researcher re-estimated the validity of the questionnaires as follows. First, content validity was confirmed when the questionnaires were submitted to several experts. Furthermore, a confirmatory factor analysis was also run for this purpose. Cronbach's alpha was used to assess their reliability. Factor analysis results and Cronbach's alpha coefficients are reported in Table 1.

Variable	Dimensions	No.	Item	Path coefficient	t-value	Cronbach's alpha coefficients	KMO	Bartlett				
Moral intelligence	Truthfulness	1	a1	0.82	9.71	0.879	0.80	0.000				
			a2	0.87	11.41							
	Fulfillment of a promise	2	a3	6.92	0.57							
			a4	8.68	0.72							
	Accountability	3	a5	9.77	0.80							
			a6	8.88	0.75							
	Serving others	4	a7	1.94	0.90							
			a8	1.86	0.84							
Organizational agility	Responsiveness	5	b1	10.75	0.82	0.910						
			b2	11.87	0.86							
			b3	6.33	0.65							
	Competency	6	b4	10.30	0.83							
			b5	11.03	0.87							
	Flexibility	7	b6	12.94	0.94							
			b7	12.38	0.98							
			b8	10.27	0.87							
	Speed	8	b9	9.51	0.91							
			b10	5.60	0.58							
	Service quality provision	Reliability	9	b11	10.31				0.82	0.796		
				b12	10.16				0.88			
c1				10.63	0.87							
Warranty		10	c2	8.17	0.68							
			c3	9.81	0.83							
Physical appearance		11	c4	10.74	0.91							
			c5	6.10	0.65							
Accountability		12	c6	4.94	0.53							
			c7	1.15	0.36							
Empathy		13	c8	0.96	0.16							
	c9		8.71	0.99								
			c10	7.27	0.81							
Moral intelligence	X <sup>2</sup>	df	x <sup>2</sup> /df	RMSEA	GFI	AGFI	NFI					
	20.20	14	1.44	0.05	0.96	0.90	0.98					
Organizational agility	X <sup>2</sup>	df	x <sup>2</sup> /df	RMSEA	GFI	AGFI	NFI					
	164.75	98	1.68	0.03	0.93	0.92	0.95					
Service quality provision	X <sup>2</sup>	Df	x <sup>2</sup> /df	RMSEA	GFI	AGFI	NFI					
	80.07	45	1.77	0.06	0.93	0.91	0.95					

**Table 1** Validity and reliability of research questionnaires

As evidence indicates, the Cronbach's alpha coefficients of all components are greater than the recommended value of 0.7; hence, the research questionnaires have an acceptable reliability. KMO coefficients for all the three questionnaires were greater than the minimum accepted value of 0.6 and the significance level of Bartlett's test was also <0.05; therefore, the research sample was sufficient to run confirmatory factor analysis. Confirmatory factor analysis values at standard coefficients for each questionnaire were at a suitable level as the t-values of the confirmatory factor analysis for all four questionnaires were beyond the range of +1.96 to -1.96. Further, the content analysis of the questionnaire confirmed the confirmed validity of the questionnaires. The results of goodness of fit indices and confirmatory factor analysis indicated that all the four questionnaires were well fitted. The confirmatory factor analysis graphs of the questionnaires are as follows:

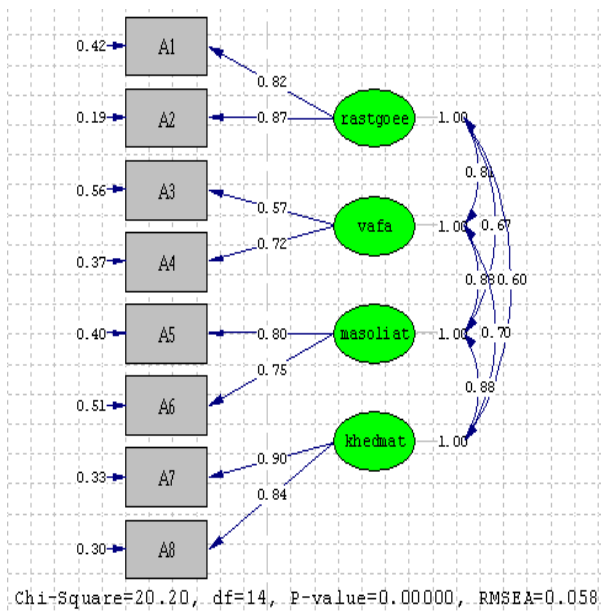


Figure 2 Confirmatory factor analysis results of moral intelligence questionnaire (standard coefficients)

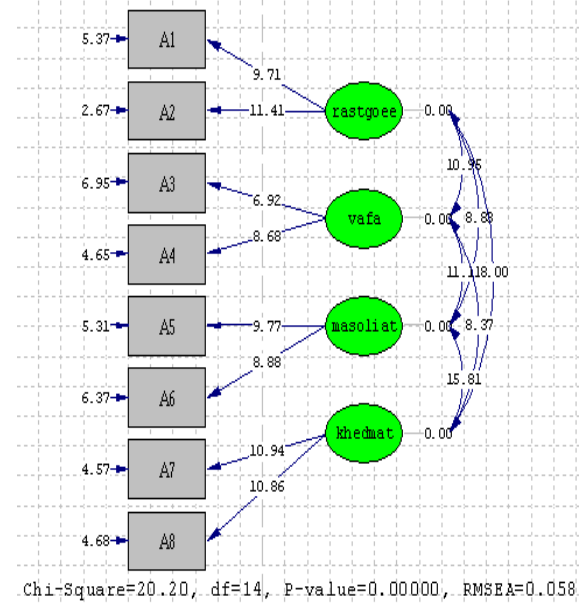


Figure 3 Confirmatory factor analysis results of moral intelligence questionnaire (T-values)

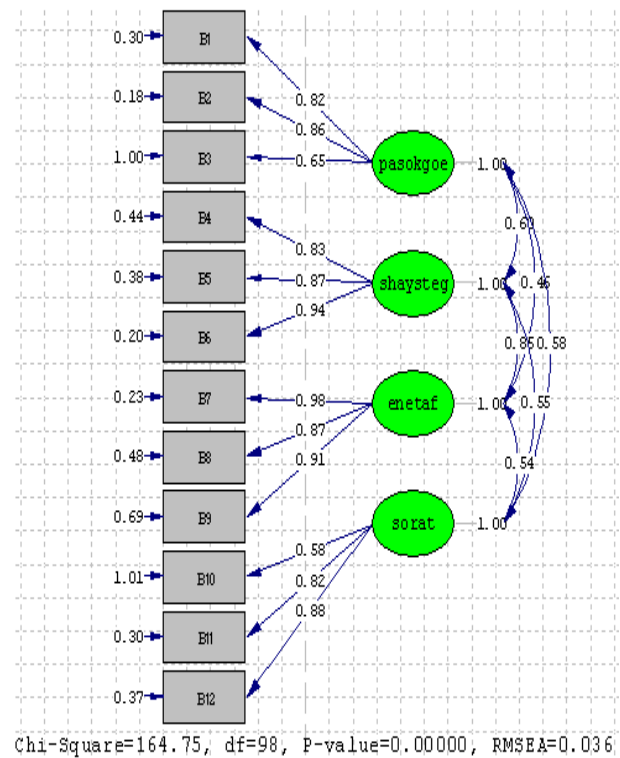


Figure 4 Confirmatory factor analysis results of organizational agility questionnaire (standard coefficients)

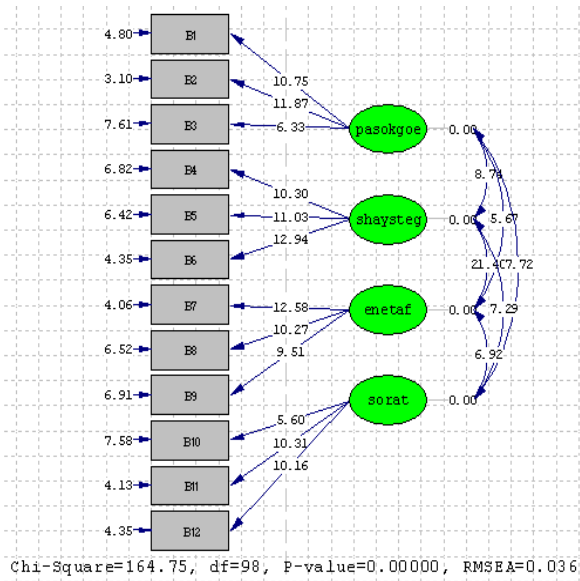


Figure 5 Confirmatory factor analysis results of organizational agility questionnaire (T-values)

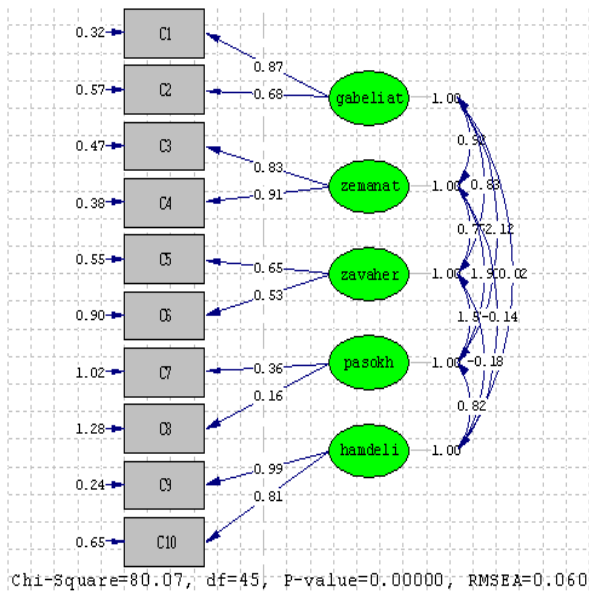


Figure 6 Confirmatory factor analysis results of service quality provision questionnaire (standard coefficients)

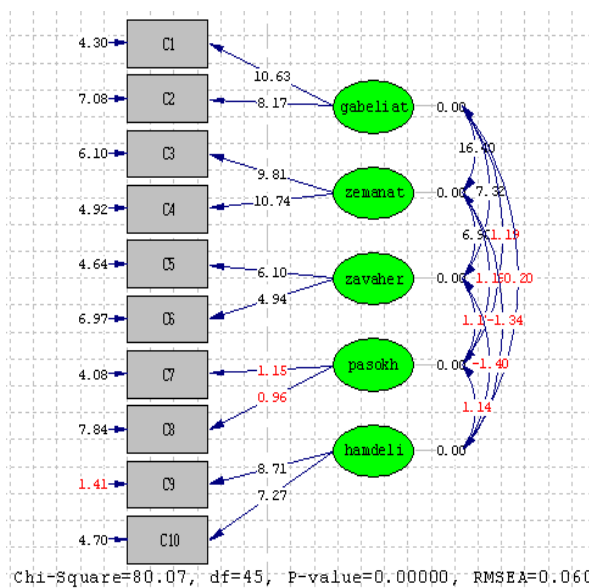


Figure 7 Confirmatory factor analysis results of service quality provision questionnaire (T-values)

Findings

Descriptive statistics

Out of 132 participants, 79 persons (59.8%) were male and 53 persons (40.2%) were female. There were about 12.9% (n=17) of respondents aged below 30 years old, 32.6% (n=43) between 30 and 40 years old, 35.6% (n=47) between 40 and 50 years old, and 18.9% (n=25) above 50 years old. About 11.4% (n=15) of respondents had a work experience less than 5 years old, 22.0% (n=29) had a work experience between 5 to 10 years, 28.8% (n=38 persons) had a work experience of 10 to 15 years, and 37.9% (n=50) were with a work experience of >15 years.

Gender	Frequency	%
Male	79	59.8
Female	53	40.2
Total	132	100

Table 2 Frequency distribution by gender

%	Frequency	Age(years)
12.9	17	<30
32.6	43	30-40
35.6	47	40-50
18.9	25	>50
100	132	Total

Table 3 Frequency distribution by age

%	Frequency	Work experience
11.4	15	<5
22.0	29	5-10
28.8	38	10-15
37.9	50	>15
100	132	Total

Table 4 Frequency distribution by work experience

The following tables present descriptive statistics of the research variables (moral intelligence, organizational agility, and service quality provision).

Variable	N	Mean	Sd	Variance	Kurtosis	Skewness
Truthfulness	132	3.742	1.864	3.475	-0.755	-0.098
Fulfillment of a promise	132	4.082	1.609	2.591	0.065	-0.082
Accountability	132	3.641	1.816	3.300	-0.187	-0.112
Serving others	132	3.709	1.909	3.647	-0.438	-0.144
Moral intelligence	132	15.175	5.909	34.926	-0.089	-0.137

Table 5 Descriptive Statistics of Moral Intelligence



Variable	N	Mean	Sd	Variance	Kurtosis	Skewness
Responsiveness	132	5.788	2.590	6.713	-0.546	-0.128
Competency	132	6.064	2.828	8.002	-0.366	-0.047
Flexibility	132	5.926	3.024	9.146	-0.853	0.009
Speed	132	4.913	2.577	6.646	0.046	0.117
Organizational agility	132	22.693	9.201	84.675	-0.267	-0.069

Table 6 Descriptive Statistics of Organizational Agility

Variable	N	Mean	Sd	Variance	Kurtosis	Skewness
Reliability	132	3.617	1.819	3.309	-0.276	-0.180
Warranty	132	3.164	1.962	.852	-0.658	0.177
Physical Appearance	132	3.831	1.687	2.846	-0.315	-0.100
Accountability	132	3.054	1.601	2.565	-0.767	-0.048
Empathy	132	3.215	2.36	4.145	-0.373	0.293
Service quality provision	132	16.883	6.024	36.299	-0.222	-0.131

Table 7 Descriptive Statistics of service quality provision

**Inferential statistics**

Before analyzing the data, their distribution was evaluated using the Kolmogorov-Smirnov test, and it was revealed that the distribution of variables was not normal so that non-parametric tests were used. Partial least squares method, which could be implemented using Smart PLS software, was then run. Visual outputs of the hypotheses in estimating the path coefficients and coefficients of significance are shown in the following figures.

Variable	K-S test	Sig	Finding
Moral intelligence	0.748	0.031	Not normal
Organizational agility	0.766	0.001	Not normal
Service quality provision	1.046	0.024	Not normal

Table 8 Kolmogorov-Smirnov test results for measured indices

Structural path coefficients of research hypotheses:

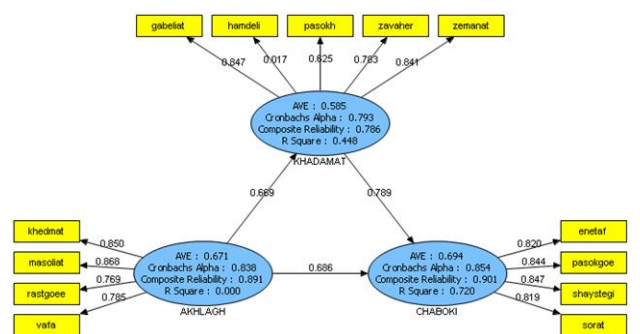


Figure 8 The estimated model of research hypotheses with regard to path coefficients

The coefficients presented in the figure above are the standardized regression coefficients, or in other words, the beta values in the regression model, which specify the greatness of the independent variable effect on the dependent and mediating variables. To ensure the meaningfulness of the coefficients, one should refer to t-values. The following figure shows t-values in estimating the meaningfulness of the standard coefficients in the previous figure.

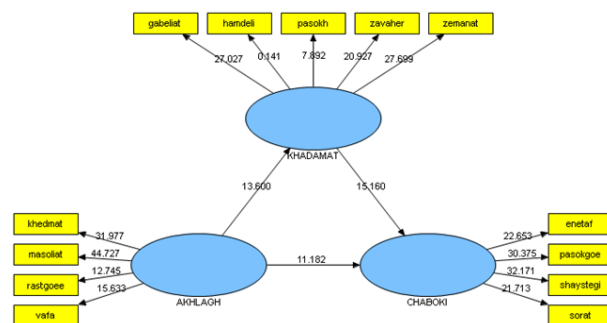


Figure 9 Coefficients of significance for the estimated model of research hypotheses

Main hypotheses	From	Path To	Direct impact	Indirect impact	Total impact	t-value	Result
First	Moral intelligence	Organizational agility	0.686	---	0.686	11.182	Confirmed
Second	Moral intelligence	Service quality provision	0.669	---	0.669	13.600	Confirmed
Third	service quality provision	Organizational agility	0.789	---	0.789	15.160	Confirmed

Table 9 T-values and path coefficients of hypotheses

Variables	Endogenous indices			Exogenous indices		Quality indices of model		
	$\alpha$	$\rho$	AVE	$r^2$	$Q^2$	Com	Red	GOF
Moral intelligence	0.838	0.891	0.671	---	0.554	0.671	---	0.0633
Organizational agility	0.854	0.901	0.694	0.720	0.578	0.693	0.483	
Service quality provision	0.793	0.786	0.585	0.448	0.586	0.696	0.212	

Table 10 Evaluation of endogenous and exogenous and total indices of research hypotheses

Since Cronbach's alpha coefficients and composite reliability values are > 0.7, the reliability of the model blocks is accepted. Moreover, the AVE value was >0.5; therefore, the exogenous model indices were in an acceptable state. The evaluation of the endogenous model indices also confirmed the appropriateness of the model as the coefficients of determination had high values and Stone-Geisser Criterion ( $Q^2$ ) is not zero. The indices of the whole model were also in an appropriate state, and the GOF index confirmed that the model had a predictability of 0.633 for the research hypotheses.

## Conclusion

Regarding the first research hypothesis, it could be inferred that moral intelligence had a positive effect on promoting organizational agility in Hamedan Red Crescent Organization as the level of significance was  $<0.01$ . Moral intelligence could justify 686% of variations of the organizational agility in Hamedan Red Crescent Organization; hence, the first main hypothesis of the study was confirmed. This finding is consistent with the findings of some other researchers, including Alizadeh (2018), Bahadori and Habibi (2016), Dowlat Shah et al. (2017), Izogo and Ogba (2015), Kashif et al. (2015), Gabriel et al. (2015).

Regarding the second hypothesis of the research and given the direct impact of 0.669, it could be claimed that the effect of moral intelligence on the service quality provision in the Red Crescent Organization of Hamedan province was positive. Hence the null hypothesis is rejected, and H1 is confirmed. The t-value for the variables 'moral intelligence' and 'service quality provision' is 13.600 ( $>2.56$ ) at confidence level of 99% and error level of 1%, indicating that the relationship between moral intelligence and service quality provision is meaningful at confidence level of 99% in the Red Crescent Organization of Hamedan province. Moreover, the path coefficient for these two variables is estimated to be 0.699, confirming the effect of the moral intelligence on the service quality provision in the Red Crescent organization of Hamedan province. Accordingly, since the t-value of the second main research hypothesis ( $t=13.600$ ) is ( $>2.56$ ), the second hypothesis of the study is also confirmed. In other words, it could be stated that moral intelligence can justify 669% of variation of the service quality provision in the Red Crescent Organization of Hamedan province. In other words, moral intelligence has a significant effect on the service quality provision in the Red Crescent Organization of Hamedan province. This finding is in a similar vein with the findings of other researchers (e.g., Alizadeh, 2018; Yaldachi, 2016; Elahinezhad et al., 2016; Ahmadi & Asgari Dehabadi, 2015; Izogo & Ogba, 2015; Sherehiy & Karwowski, 2014; and Maja et al., 2014).

Considering the third hypothesis of the research and given the direct impact of 0.789, the effect of the service quality provision on organizational agility in the Red Crescent Organization of Hamedan province was positive. The t-value for the variables 'organizational agility' and 'service quality provision' is 15.160 ( $>2.56$ ) at confidence level of 99% and error level of 1%, indicating that the relationship between organizational agility and service quality provision is meaningful at confidence level of 99% in the Red Crescent Organization of Hamedan province. Moreover, the path coefficient for these two variables is estimated to be 0.789, confirming the effect of the service quality provision on organizational agility in the Red Crescent organization of Hamedan province. Accordingly, since the t-value of the third main research hypothesis ( $t=15.160$ ) is  $>2.56$ , the third research hypothesis is also confirmed. In other words, moral intelligence can justify 789% of variation of the organizational agility in the Red Crescent Organization of Hamedan province. In other words, service quality provision has a significant effect on the organizational agility in the Red Crescent Organization of Hamedan province. The finding is in line with the findings of Bahadori and Habibi (2016); Bidokhti et al. (2016); Yaldachi (2016); Elahinezhad et al. (2016); Ahmadi and Asgari Dehabadi (2015); Izogo and Ogba (2015); Gabriel et al. (2015), and Hioun and Kim (2011).

## Testing Sub-hypotheses of the Study

The test results for the first sub-hypothesis showed that truthfulness, fulfillment of a promise, accountability, and serving others have positive and significant effects on promoting organizational agility in the Red Crescent organization of Hamedan province.

First Sub-hypothesis	Path		Direct impact	Indirect impact	Total impact	t-value	Result
	From	To					
First	Truthfulness	Organizational agility	0.136	---	0.136	4.754	Confirmed
Second	Fulfillment of a promise	Organizational agility	0.330	---	0.330	3.356	Confirmed
Third	Accountability	Organizational agility	0.182	---	0.182	2.820	Confirmed
Fourth	Serving others	Organizational agility	0.437	---	0.437	5.467	Confirmed

**Table 11** T-values and path coefficients of first sub-hypothesis

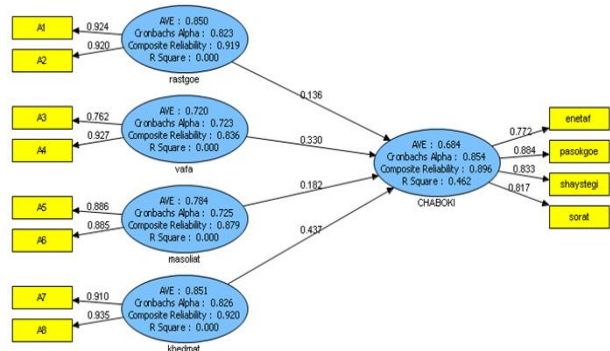


Figure 10 Path coefficients of the estimated model for first sub-hypothesis

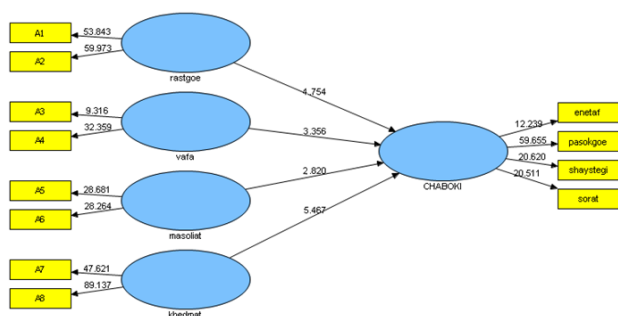


Figure 11 Coefficients of significance for the estimated model for first sub-hypothesis

The test results for the second sub-hypotheses of the research revealed that, with regard to the direct effects of the concerned variables (0.551, 0.560, 0.241, 0.437), the effects of truthfulness, fulfillment of a promise, accountability, and serving others on service quality provision in the Red Crescent organization of Hamedan province were positive and meaningful.

Second Sub-hypothesis	From	Path	To	Direct impact	Indirect impact	Total impact	t-value	Result
First	Truthfulness	Service quality provision	Service quality provision	0.551	---	0.551	5,600	Confirmed
Second	Fulfillment of a promise	Service quality provision	Service quality provision	0.560	---	0.560	5,870	Confirmed
Third	Accountability	Service quality provision	Service quality provision	0.241	---	0.241	5,587	Confirmed
Fourth	Serving others	Service quality provision	Service quality provision	0.437	---	0.437	8,886	Confirmed

Table 12 T-values and path coefficients of second sub-hypothesis

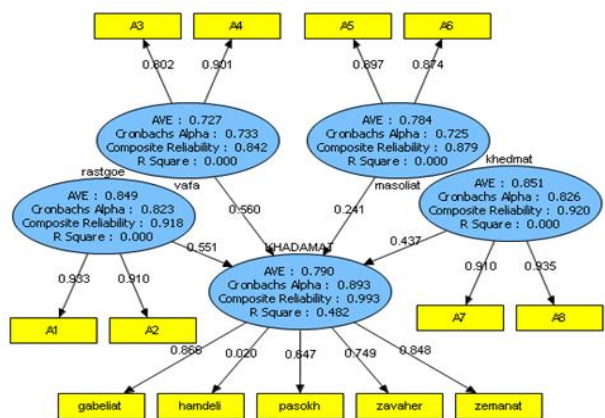


Figure 12 Path coefficients of the estimated model for second sub-hypothesis

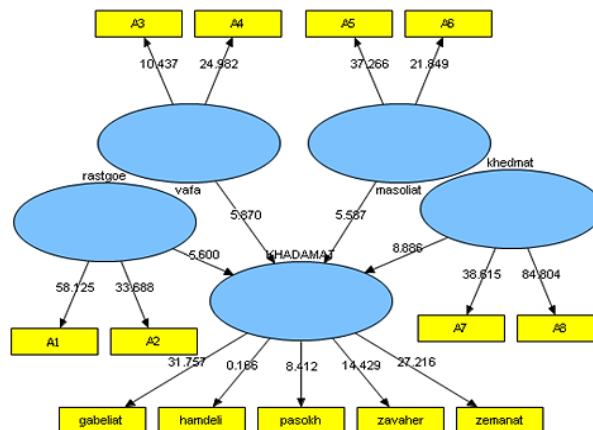


Figure 13 Coefficients of significance for the estimated model for second sub-hypothesis

Testing the third sub-hypothesis of the research showed that, with regard to the direct effects of the concerned variables (0.585, 0.535, 0.714, 0.245, and 0.551), the effects of reliability, warranty, physical appearance, accountability, and empathy on promoting organizational agility in the Red Crescent organization of Hamedan province were positive and meaningful.

Third Sub-hypothesis	From	Path	To	Direct impact	Indirect impact	Total impact	t-value	Result
First	Reliability	Organizational agility	Organizational agility	0.585	---	0.585	5,445	Confirmed
Second	Warranty	Organizational agility	Organizational agility	0.535	---	0.535	5,625	Confirmed
Third	Physical Appearance	Organizational agility	Organizational agility	0.714	---	0.714	7,601	Confirmed
Fourth	Accountability	Organizational agility	Organizational agility	0.245	---	0.245	4,140	Confirmed
Fifth	Empathy	Organizational agility	Organizational agility	0.551	---	0.551	4,438	Confirmed

Table 13 T-values and path coefficients of third sub-hypothesis

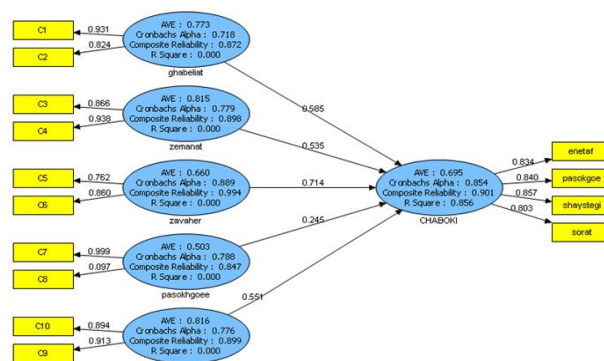


Figure 14 Path coefficients of the estimated model for third sub-hypothesis

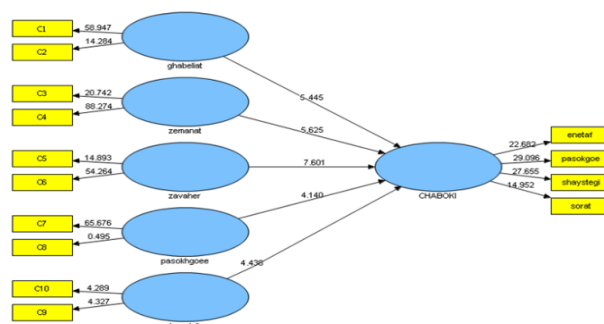


Figure 15 Coefficients of significance for the estimated model for third sub-hypothesis

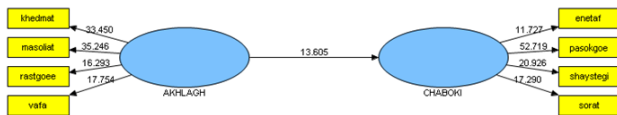
**Testing the Main Hypothesis of the Study**

Moral intelligence has a positive and significant effect on improving organizational agility in crisis situations with regard to the mediating role of service quality provision in the Red Crescent Organization of Hamedan Province.

**A) Examining the main effects of the model (with no intervening or mediating variable)**



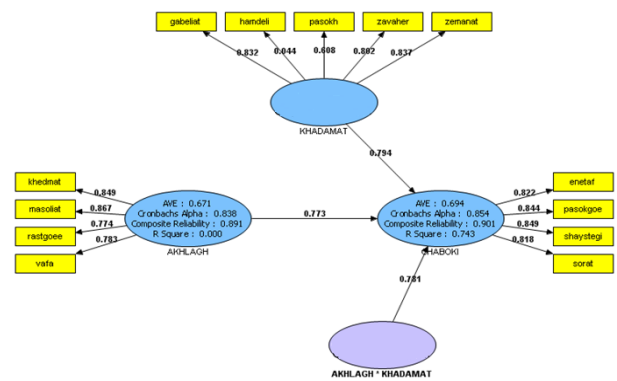
**Figure 16** Path coefficients of the estimated model for main research hypothesis



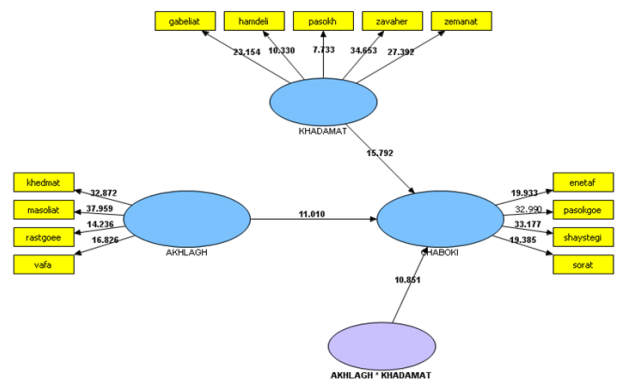
**Figure 17** Coefficients of significance of the estimated model for main research hypothesis

Variables	Endogenous indices			Exogenous indices		Quality indices of model		
	$\alpha$	$\rho$	AVE	$r^2$	$Q^2$	Com	Red	GOF
Moral intelligence	0.838	0.891	0.671	---	0.567	0.671	---	0.0533
Organizational agility	0.854	0.896	0.684	0.426	0.542	0.660	0.253	

**Table 14** Evaluation of endogenous and exogenous indices of the model and main research hypothesis



**Figure 18** Path coefficients of the estimated model for main research hypothesis with regard to mediating variable



**Figure 19** Coefficients of significance of the estimated model for main research hypothesis with regard to mediating variable

**The assessment of the research model for the general research hypothesis with regard to mediating variable**

The values of the exogenous, endogenous, and whole model indices for the main research hypothesis are as follows:

Variables	Endogenous indices			Exogenous indices		Quality indices of model		
	$\alpha$	$\rho$	AVE	$r^2$	$Q^2$	Com	Red	GOF
Moral intelligence	0.838	0.891	0.671	---	0.671	0.671	---	0.712
Organizational agility	0.854	0.901	0.694	0.743	0.694	0.694	0.505	

Based on the GOF value for the main hypothesis of the research, it is possible to predict the relationships in the model by 0.71% with regard to the mediating variable.

**Determining the effect size of the mediating variable**

After detecting that the intervening or mediating variable can mediate the relationship between endogenous and exogenous variables, the effect size should be estimated. In fact, when the significance of the t-value at the concerned level of confidence is approved, the mediating effect of the mediating variable should also be calculated (Henseler & Fassott, 2010).

Henseler and Fassott (2010) introduced the following equation for determining the effect size of the mediating variable:

$$f^2 = \frac{R^2_{\text{model with moderator}} - R^2_{\text{model without moderator}}}{1 - R^2_{\text{model with moderator}}}$$

$$f^2 = \frac{0.743 - 0.426}{1 - 0.743} = \frac{0.317}{0.257} = 1.23$$

**Recommendations**

**Suggestions based on the results of the first hypothesis testing:**

- Considering the fact that a significant portion of the moral intelligence skills and capabilities is acquired, it that the Red Crescent organizations are recommended to pay specific attention to moral intelligence in their training programs on organizational agility.

- The authorities and managers of the Red Crescent organizations should spare their efforts to convert the organization's environment into a suitable ethical environment in order to promote organizations' effectiveness and organizational agility.
- Regarding the variable truthfulness, the authorities of the Red Crescent Organization should internalize this feature in the organization and among the employees and teach their employees to do what they think is right and tell the truth at each occasion.
- Regarding the variable 'fulfillment of a promise', the authorities of the Red Crescent Organization are suggested to pay attention to this variable and teach their employees to be honest in their work, not to make promises of what they cannot do, and always be considerate of their words.
- Regarding the variable 'accountability', the authorities of the Red Crescent Organization are recommended to accept the responsibility for their actions and their consequences in any case and teach their employees this point.
- Regarding the variable 'serving others', the authorities of the Red Crescent Organization are suggested to hold some relevant training courses to promote serving others and teach their employees to undertake responsibility and pay attention to others in accordance with values and beliefs in any case and at any time.
- With regard to the variable truthfulness, the authorities of the organization need to adopt some appropriate measures. Lack of attention to truthfulness and customers' behaviors in the organization leads to a number of problems for the organization, one of the most critical of which is reduced efficiency in term of serving the customers.
- The managers and authorities of the organization should be aware that loyalty and fulfilment of promises in the organization greatly depends on the possibility of professional development, equity in the distribution of rewards and its procedures, and organizational interactions; hence, they are suggested to consider these issues.
- Regarding the variable 'accountability', it is suggested that some experts of the field be invited to hold courses inside and outside the organization to familiarize the staff with the new methods of accountability in order to increase the efficiency and effectiveness of the staff's accountability in the organization.
- For serving others, the authorities of the organization are suggested to pay attention to their employees in the organization, motivate them, and persuade them mentally through training them how to offer services to others. They should encourage employees to cause changes and development in the organization in order to promote and improve the quality of services.

#### ***Proposals derived from the results of the second hypothesis:***

- Considering the significance of moral intelligence in the development of the Red Crescent organization and ethical values, it is suggested to consider ethics training in determining the effectiveness and goals of human resources in the organization in order to improve the quality of services.
- The managers and authorities of the organization should be informed of the implications of moral intelligence in order to enhance the quality of their organization's services.

#### ***Suggestions based on the results of the third hypothesis:***

- -The Red Crescent Organization must pay enough attention to the client in providing quality services in order to attract their trust. Meanwhile, respect for the customers and fulfillment of duties and responsibilities, as well as the determination of their expectations of the services provided by the Red Crescent Organization would also lead to enhanced organizational agility.
- It is suggested that the Red Crescent Organization increase its organizational agility through improving the quality of services offered to the customers. When the customers rely on the service provider, they would constantly use the organization's services and recommend them to others.

- Regarding the variable 'reliability', the authorities are suggested to train employees on how to treat customers adequately and appropriately. The employee's decent behavior gradually creates customers' trust as they feel secure in their interactions with the employees of the organization.

In the case of warranty, the authorities should be ensured of the capabilities of the system in providing reliable services, the completion of a task or service at due time, and service provision at due time.

- Regarding the variable 'physical appearance', the authorities are recommended to pay more attention to the arrangement of equipment and facilities in the organization and the physical aspects of the organization in providing services, including physical appearance of the equipment. These cases include the appearance of employees, proper arrangement of equipment and tools, and organization of the work environment.
- For responsiveness, the authorities should prepare their staff to assist the customers in providing prompt and reliable services and being responsive and willingness to resolve their problems.
- Regarding the variable 'empathy', the authorities are suggested to teach their employees about respecting the customers, knowing their interests, communicating with them, ensuring the ease of contact, and identifying and paying special attention to their demands.

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## Financial inequality: the relationship between consumer taxes and social programs in the Argentine Republic in the period 2015-2019

### Desigualdad financiera: la relación entre impuestos al consumo y programas sociales en la República Argentina en el periodo 2015-2019

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#### Abstract

Despite the implementation of several Conditional Money Transfer Programs (CMT) and the consequent reduction in poverty and indigence rates, without ignoring that said reduction has been controversial due to its low level of evaluation and control; as well as the effective increment in job placement of vulnerable population sectors, Argentina keeps having high levels of inequality. From a financial analysis aspect, this situation is largely due to the consolidation of a highly regressive detractive system, characterized by the imposition of indirect taxes that are levied on productive and intermediate activities and final consumer products without taking into account the effective tax capacity of the actual or incidental recipients of the tax. In a country like Argentina, which belongs to the most unequal continent in the world, it is essential to start being, and not seem; by this, we mean that the fiscal system structure must pursue and encourage the achievement of a structural middle class, starting by having in consideration the severe economic asymmetries, which occur both at a population level as well as at a regional geographic context. One of the main situations that countless families suffer is the lack of coordination of fiscal reforms that tend to the development and consolidation of a structural middle class through a progressive, inclusive and liable tax system.

**Social development, Taxation, Tax system, Transfers, Degressivity**

#### Resumen

A pesar de la implementación de diversos Programas de TMC y la consecuente reducción de los índices de pobreza e indigencia, sin soslayar que dicha reducción es discutida por su escaso nivel de evaluación y control; así como, el aumento efectivo de inserción laboral de sectores poblacionales vulnerables, Argentina continúa conservando altos niveles de desigualdad. Desde una vertiente de análisis financista, esta situación se debe –en gran medida– a la consolidación de un sistema detractivo altamente regresivo, caracterizado por la imposición de tributos indirectos que gravan actividades productivas, intermedias y productos finales de consumo sin tener en cuenta la capacidad contributiva efectiva de los destinatarios reales o incidentales del tributo. En un país como Argentina, perteneciente al continente más desigual del mundo, es indispensable empezar a ser, y no parecer: la estructuración del sistema fiscal debe perseguir y alentar la consecución de una clase media estructural, tomando como punto de partida las agudas asimetrías económicas que se dan tanto a nivel poblacional como en un contexto geográfico regional. Una de las principales situaciones que sufren innumerables familias es la falta de articulación de reformas fiscales que tiendan al desarrollo y consolidación de una clase media estructural mediante un sistema impositivo progresivo, inclusivo y responsable.

**Desarrollo social, Tributación, Sistema fiscal, Transferencias, Regresividad**

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## Introduction

Since the nineties and mainly after the 2001 crisis, the Argentine State, through several public policies implemented by the governments in turn, has established diverse Conditional Money Transfer Programs (hereinafter CMT), such as the Work Plan, the Unemployed Heads of Household Plan and the Families Program, this, in response to the major lack of jobs and the growing social exclusion problem. (Kliksberg y Novacovsky, 2016). The international economic crisis of 2008-2009 became a turning point moment for Argentina and the American continent, as many countries in the region did not choose austerity and adjustment to combat the crisis, but rather choose a greater presence of the State and the increase of social investment, with several public Budget items, to minimize the economic consequences of a generalized recession for the most vulnerable social classes (Rezzoagli and Cammarata, 2016).

In this scenario, this money transfers programs with or without auditing, but with marked social purpose, instrumented by sub-national entities or directly aimed at certain citizens as beneficiaries, were one of the most significant innovations in the entire continent, although with different implementation modalities in each country, either with or without a specific time frame for implementation and durability, with or without particular terms or conditions for its granting, with or without control mechanisms and evaluation of its results.

As an example of the above, in Argentina in 2009, the Universal Child Allowance was created by the Decree 1602/2009, having as a purpose the following objectives: a) improve the situation of minors and adolescents in situations of social vulnerability; b) inclusion of various sectors of the population; c) reduce poverty levels of the most vulnerable sectors of society.

With the implementation of this form of social protection (CMT), an attempt has been made to coordinate the containment and reduction of poverty rates with the fight against inequality and the promotion of social cohesion, expanding the scope of the traditional social security (Marinozzi, 2021).

Brazil and Mexico were the first countries in the region that implemented them, in the late 1980's and early 1990's, and to this date broad coverage has been achieved throughout Latin America, since Conditional Money Transfer Programs (CTM) are currently active in more than 20 countries and project their benefits on more than 130 million people, with an impact of 0.4% of GDP in Latin America (ECLAC, 2015).

Despite the creation of several CMT Programs and the consequent, although disputed, due to its low level of evaluation and control in many countries (Rezzoagli, 2016), reduction of poverty and indigence rating, and a real increase in development possibilities and insertion of vulnerable populations sectors in the labor market, Argentina continues to maintain high levels of inequality, as many countries on the American continent (Lustig, 2017).

From a financial analysis perspective, this situation is due -in great measure- to the consolidation of a highly regressive detractive system, characterized by the imposition of indirect taxes to productive and intermediate activities, and to final consumer products without considering the real economic capacity of the actual or incidental taxpayers. In Argentina, measurements of consumption trends shows that in the period 2016-2017, the consumption of basic food products for subsistence collapsed, which are acquired and requested by the lower and middle social strata, while luxury goods purchases grew considerably (Benjamin Openhayn Economic Development Studies Center, 2017).

In this way, according to the aforementioned measurements, it can be clearly seen how the consumption in the basic food products has decline in a very considerable way; however, the opposite has happened with sumptuous goods, which acquisition reflects great economic capacities, as can be seen, for example, in the sale of motorcycles and high-quality cars which grew very considerably in 2017 (Benjamin Openhayn Economic Development Studies Center, 2017: 3), which is an important indicator of the consolidation of highly differentiated and unequal social strata.

Despite the above, which indicate the decrease in the consumption of essential food products and family development in the low and medium population sectors, according to the Argentina's National Institute of Statistics and Censuses (NISC, 2017), poverty decrease from 30% to 28.6% in the first half of 2017 (general national average), which in principle would be contradictory with the previous measurements, however, in the Northeast and Northwest of Argentina, the poverty increased during this same period, which qualifies, only with these data, a decrease in the national average that is sustained in certain regions and not homogeneously throughout the national territory. Likewise, if the data provided in the analyzed report is carefully examined, indigence, on the other hand, returning to national parameters, grew from 4.2% to 6.1%, with high percentages in the Buenos Aires suburbs (NISC, 2017), therefore, the decrease in poverty in the national average, rather than being accompanied by an increase in the structural middle class, was due in part to the increase in indigence rates, since in similar percentages the decrease in one was, in the same temporal period according to the cited official data, accompanied by the increase of the other mentioned variable.

If this is contrasted with the information provided in October 2017 by NISC itself, regarding that the Gross National Product (GNP) increased 2.7% in the second quarter of that year compared to the same period of 2016, the recovery of the Argentina's economy would seem to be contradictory with the social reality, however the improvement in GNP, as a result of the reactivation of several key sectors of the economy, such as construction and the automobile industry, among others, do not necessarily imply an equitable and proportional access of the entire population to the increase in national wealth, but, and based on the previously mentioned consumption measurements and the decrease in poverty, but with the growth in indigence, leads to think that economic rise does not necessarily imply an equitable distribution of resources and population well-being, if not that it may be monopolized by specific groups or sectors of society and in very specific regions of Argentina.

In this last point, we consider that the detractive system is an important part of the current and historical problem, and its integral rethinking constitutes an inescapable challenge for the State. One of the main failings that consolidate these situations suffered by countless families is the lack of articulation of fiscal reforms that tend to the development and consolidation of a structural middle class through a progressive, inclusive and responsible tax system. This paper analyzes the relationship between Value Added Tax (VAT) and disposable income (DI), particularly of beneficiaries of Universal Child Allowance (UCA), trying to demonstrate that all or a large part of the amount of this CMT is consequently deducted through the VAT, subsuming all effort and implementation of equalization, through the financial system, fundamentally through the creation of CMT programs in population sectors of low resources.

This means, as analyzed in the development of this non-experimental, qualitative, scientific work, that was made through the analytical-deductive method, that the State deducts a similar amount and even greater than that assigned to CMT Programs in economically and socially vulnerable population sectors, which fosters a panorama in which the levels of inequality –horizontal and vertical– within the population are maintained and gradually increase steadily, while a discourse of financial redistribution that does not materially exist is sustained.

Therefore, we part from the **central hypothesis** of considering that, *in order to achieve horizontal and vertical levels of Equality, it is necessary, in addition to the establishment of CMT, in a complementary, punctual and specific way, the structuring of a progressive tax system that pursues and encourages Equality of Opportunities.*

As a disaggregated hypothesis, it is established that *the tax system with a marked regressive tendency, disarticulates and obstructs any effort that is intended to be made by the financial system and CMT programs.*

The tax system constitutes a true generator of inequality, because the tax pressure exerted on the productive sectors and those with less economic capacity is more intense, when an effective and correct fiscal diagram should absolutely tend to the contrary (García Guerrero, Rueda López, Luque González and Ceular-Villamandos, 2021).

Making the words of Num (2011) our own, because there is no other way to say it with greater force and simplicity: *taxes generate inequality* (p.1).

Therefore, the analysis of the *disposable income* -understood as the remaining income of a person after deducting current taxes - of beneficiaries of the Universal Child Allowance (as an exemplary reference) with respect to others who do not participate in this Conditional Money Transfer Program, it is important, because allows to measure the **tax pressure** that is exerted on these socially and economically vulnerable sectors, and consequently, be able to specify whether the tax system and, more specifically, VAT (as an exemplary tax), accompany the purposes advocated by the financial system through the establishment of CMT programs or, on the contrary, they constitute regressive and confiscatory taxes that perpetuate the structural inequalities of our society, nullifying any type of effect or potential of the aforementioned programs (which is the main objective of this research).

### **CMTs as an egalitarian policy: Special reference to the Universal Child Allowance (UCA)**

It is through public interventions that the distribution determined by the exchange relations between individuals is redefined, namely, both through the detractive system with the implementation of fiscal obligations, mainly taxes, and Tax expenditure (such as fiscal stimuli), as well as, and fundamentally, by financial instruments such as subsidies and transfers, which are mechanisms that have a direct impact on the disposable income in people's homes (Valenzuela-Levi, 2021).

Also, a very important part of the State's distributive actions takes place through financial mechanisms other than transfers and subsidies, such as traditional expenditures on education and health, which do not directly affect the current disposable income of households, but have a very relevant impact delayed in time, because they promote human capacities and facilitate future insertion in the labor market.

The capacity for (re) distribution through the financial system it is very important to alter the levels of inequality in people access to resources. The distinction between elements or circumstances **exogenous to the individual** (not dependent) - such as social origin, place of birth, gender, possibility of access to education or health, among others - from those that individuals acquire through dependent actions (endogenous) throughout their life cycle - such as the effort at work and in studies -, it is essential to understand this principle of Equality in its matrix of horizontal development of opportunities (Gutiérrez and Castaño, 2021), because, although this distinction is certainly debatable in practice, the factors to be equalized between individuals should include only those that are exogenous and the endogenous differences resulting from the meritocratic parameters must be respected (Rezzoagli and Cammarata, 2016; Rezzoagli and Gamberg, 2015).

This recognition and identification of exogenous conditioning factors is important not only to diagram differentiated public policies that facilitate the development of opportunities of each individual in any part of the country in a federal context (as it is proclaimed by Argentina's Constitution, fundamentally in the Article 75, subsection 2 and 19), but also to value and control its implementation. Several countries have constitutional recognition of social rights, this is the case of Brazil, Colombia and Argentina, among others, being exemplary; however, only a few of them incorporate explicit guarantees of rights in their social protection policies and programs. Therefore, large gaps in access and coverage continue to exist for different groups of the population (Cecchini and Vargas, 2015).

In economic terms, CMTs are revealed as effective initiatives to encourage the general consumption levels of an economy (Macours et. Al., 2011), and constitute a clear example of counter-cyclical policies (Gutiérrez and Castaño, 2021), thus including sectors that otherwise could not participate - or at least not in the way that they do with the benefits obtained through this programs - in the purchasing bid for goods, so necessary in a recessive economic context. In the search for a fair economy, CMTs are instruments that seek to contribute to the classic Keynesian recipe of alleviating the ills of the recessive economy through a channeling of public resources that are deliberately destined to attack indigence and poverty, but also at the same time encouraging domestic economic activity and mainly domestic consumption.

CMT programs are part of the financial public policies, and at the same time, of the social policies that a State can carry out to face the aforementioned challenges (Cecchini and Martinez, 2011), which is why they cannot be analyzed apart from the socio-political and economic context that influences its design and implementation, since it is logical that it is not the same to implement CMTs in highly unequal regions than in regions that are homogeneous with respect to the horizontal "taking advantage" of opportunities (access to health, education, public services) or measure a low or medium Gini coefficient in relation to poverty, and/or have an adequate distribution of the geographic gross product and formal employment throughout the territory of the country in question. In these latter cases, necessarily the redistributive and solidarity policies within which CMTs are framed lose importance in the face of the need to articulate greater and better incentives for competition and fiscal co-responsibility.

Effectively promoting social inclusion and the fact of being able to take advantage of opportunities that arise, requires an initial understanding of the factors that work against it. We can basically mention two very important ones, such as social exclusion and poverty. Now, social exclusion describes a state in which individuals are unable to participate fully in economic, social, political and cultural life, as well as defines the process that leads to such a state. Participation in society and the possibility of taking advantage of development opportunities can be hampered when people lack real and effective access to material resources, including monetary income, employment, land, housing, or essential services such as education and healthcare. It is also frustrated when people have no voice, cannot exercise their rights, and do not have the same respect for their dignity.

Therefore, poverty is an important and perhaps the most significant dimension of exclusion, although not the only one (it can also occur due to a disability or a person's sexual orientation, without necessarily living in poverty). When it comes to helping poor people, it must be taken into consideration that this does not have to do only with a deficit of material resources but is also related to the context of decision-making (World Bank, 2015).

People who have to focus primarily on ensuring access to basic necessities such as food or clean water do not have the same capacities and the same energy to embark on a careful deliberation about their possibilities for growth, unlike those who have the basic needs covered. In this same matter, in the first years of a human being's life, malnutrition, called for that period of existence of the individual: child malnutrition, is particularly serious (although it is in all stages), because it always penetrates in areas where the self-esteem of its protagonists is fragile, and where the lack of hygiene consolidates human misery, since the undernourished arises in those places where there is NO drinking water, hot water, sewers and bathrooms, in short, when these elements that constitute INALIENABLE HUMAN RIGHTS does not exist.

"Well, in this environment of misery, where the absence of family parties, music, colors, joy or other festive realities stand out, discouragement and sadness make their way through the lack of respect for one's own body and its appearance (lack of hygiene and beauty), and also due to the lack of esteem for the home itself... In short, the parents of the undernourished cannot give their children joy if they don't have it (nobody gives what they don't have); So if we want to help them, we must provide them with hot water, hygiene, affection, understanding, love and education. And with the passing of time we will gather from them those same virtues; and little by little that other great evil that causes child malnutrition will be extinguished: citizen insecurity (who does not respect their body cannot respect that of others) and over time we will reap the same as we sow" (Albino, 2010: 34 and 35).

As can be inferred from the Considerations of the PEN Decree No. 1602/09, the importance of this CMT programs consists of granting a non-contributory benefit -similar to the one that received the children of formal or registered workers- to those boys, girls and adolescents residing in the Argentine Republic, who have no other family allowance provided by this law and belong to family groups that are unemployed or work in the informal economy. In this decree, it was established that the UCA program would be financed with resources from the National Agency of Social Security (ANSES) Sustainability Guarantee Fund.

The program began to be implemented during the first quarter of 2010 with the primary objective of equalizing the income of those children whose parents were not incorporated into the formal labor market, and therefore did not receive the child allowance stipulated in the contributory family allowance regime (MECON, 2009). The UCA, like other similar policies previously mentioned in the region, acquires the quality of focusing on direct money transfers, specifically for minors, and transferable to the responsible adults. In mid-April 2011, the creation of the Universal Pregnancy Allowance (UPA) was announced. The main objective of the program is to reduce infant mortality, having as beneficiaries' pregnant women from week 12 of the gestation period, who must comply with all prenatal controls required by the public health system.

Likewise, the UCA's own conditionality - which allows the monthly benefit stipend to be charged - consists of the annual presentation of the PS Book Form. 1.47 or also called "Minor's Social Security, Health and Education Book", a document signed by educational and health institutions, in which it is certified that the minor - the true recipient of the benefit - regularly attends educational establishments and possesses all the vaccines required by the Official Vaccination Calendar, prepared by the Ministry of Health of the Nation, otherwise the payment of 20% - accumulated month by month - of the benefit is canceled, and the total monthly payment of the stipend is suspended until satisfaction of conditionality.

It is important in this analytical area to make some clarifications: a) only 20% of the amount of the stipend is subject to the aforementioned condition, which is accumulated month by month until the date of submission of the PS 1.47 Book Form. Once the presentation is completed, the accumulated money is paid in full; b) The remaining 80% has the legal nature of a Direct Transfer –without any conditionality, whose payment is made month by month. However, the non-presentation of the Book Form, culminates with suspension of payment of the benefit until the situation is regularized. Since its implementation, different reports and studies have highlighted the positive impact of the UCA to reduce the poverty and indigence rates in our State, as well as the levels of school dropouts and child labor (ILO, 2015).

Despite the positive effects that this Program has generated on the economy in general and in the Household Disposable Income in particular, various criticisms that have been raised about it must be highlighted. To this end, we will review the main debates and questions that legal and economic dogmatics have raged around UCA from its creation to the present:

#### a. Universality

It is one of the points that generates the greatest questions and that, at the same time, produces severe difficulties for its study. The main question: Is the UCA a truly universal program? Does it reach each and every one of its beneficiaries? And this is where the difficulties begin: the absence of official statistics does not allow us to accurately determine the number of beneficiaries- under 18 years of age - residing in Argentina (Lo Vuolo, 2011), as well as determining the percentage of the population that receives –or not- protection of some kind. There are reports that conclude that between 18 and 28% of those under 18 years of age do not perceive any benefit (Lozano and Raffo, 2010), in contrast to other studies that estimate a level of lack of protection close to 2% (Bertranou, 2010).

In a legal-institutional context, where equal opportunities is a constitutional mandate that seeks to guarantee the same starting point for the entire population, measures must be taken to: a) determine whether the benefit is capable of reaching all its addressee; b) if this question is answered in a negative way, the reasons why this benefit does not reach its beneficiaries and who are the most affected groups must be specified; c) act accordingly with the studies carried out.

#### b. The so-called “*punitive conditionality*”.

Another of the great discussions advocated by dogmatics is related to the alleged *punitive conditionality* that the UCA holds. As previously established, to access the 20% of the TMC program stipend, the PS 1.47 Book Form must be submitted annually. The non-presentation or the presentation extemporaneous or late, eliminates the right to collect the remaining percentage of the benefit.

About that, a sector of the doctrine considers totally inadmissible that a right that is intended to be universal is subject to punitive conditions, mainly for the following reasons: a) the minor - who is the legal recipient of the benefit - is not the one who bears the burden to present this form, but rather its representatives, therefore it does not seem appropriate to subordinate the right to a benefit that is not fulfilled by its recipient; b) Conditionality is not a characteristic of universal rights: *“Far from establishing children's rights, conditionality is a mechanism that limits personal autonomy, establishing relationships of subordination and social control that open the door for the use of programs for political purposes”* (Lo Vuolo, 2011: p. 221).

On the other hand, another academic sector considers that the conditions are fundamental for the validation and operation of the program: *“if the conditions does not exist, the income transfer programs in general –and the UCA in particular– could be criticized on some basis as policies of a “clientelist” nature, as they would not guarantee the increase of the future capacities of the recipients ”* (Kliksberg and Novacovsky, 2016: p. 23).

Likewise, the establishment of this conditionalities is supported by the beneficiaries, who see it as an obligation-benefit (Mazzola, 2011), that is, as a benefit earned in exchange for an effort, which consolidates a certain social legitimation of conditionality (Kliksberg and Novacovsky, 2016).

### c. The creation methodology.

Certain academic sectors question the fact that the UCA is regulated by a National Executive Power decree, because of the margin of discretion available to the political leadership on duty to introduce modifications - and even eliminate it - without facing any parliamentary debate.

### d. Lack of official statistics by public institutions

This is perhaps one of the biggest deficits that the UCA program fosters. A review of the existing empirical studies reveals that in their majority to measure the impact of the UCA they carry out simulations, recognizing that there are limitations to this, since the only information available comes from the Permanent Household Survey (PHS-NISC).

However, this instrument does not identify who are the recipients of the Assignment (Mecon, 2009; Gasparini and Cruces, 2010; Bertranou and Maurizio, 2012) and at the same time, for some years, the quality of information of this survey produced by NISC, is questioned due to the changes made in the methodology, particularly in the sample design (Lidemboim, 2011; ECLAC, 2012).

The lack of official statistics, or rather, of reliable official statistics, make it difficult to know with certainty the impact that UCA have had on the population, that is, the precise level at which they have contributed -or not- to reduce indigence and poverty.

Finally, it is important to observe in this type of program, that money circulates the same as any other object or good (water, electricity, gas, etc.) generating tangible possibilities to reduce poverty and social exclusion, although also, from a use distorted and discretionary, it can act by ratifying and even deepening social differences and inequalities. The money transferred to the recipients, generally low-income people, presents previous or subsequent conditions regarding its distribution and enjoyment, typical of evaluations and moral judgments carried out by groups in dissimilar positions in the social field, and therefore, with different appreciation schemes, economic and cultural dispositions and practices.

As long as the selection of beneficiaries remains limited to the population living in chronic poverty, it is unlikely that increasing coverage will become a problem. Structural poverty varies little over time and requires long-term interventions. The long-term objective of this CMT is to ensure that the children are sane, healthy and achieve over the years a sufficiently high school level to allow them to escape from poverty through employment, eliminating the need for that the next generation receive welfare. The beneficiary households will “graduate” from the program when their children finish secondary school (middle school) and have secured a decent job.

These programs in national or total quantitative terms were and are considered very positive by different international organizations (UN, WB, ECLAC) based on the results they produced, but the lack of coordination of subnational governments with the central government, provides us with qualitative regional situations. (problematic) of urgent solution.

Thus, with respect to the national average, there is clearly a reduction in poverty and indigence levels through the use of this type of policies; however, in front of this important achievement we can glimpse the uneven effectiveness that had and has in relation to each región of the country.

Ultimately, the creation parameters and the foundations that accompany the development and implementation of the UCA are consistent and acceptable by experts as policies for equalization and elimination of exogenous conditioning factors that limit individual development potential. Obviously, it has numerous criticisms and challenges both in implementation and in evaluation and control, as we have stated previously. Now, beyond these questions, in the next point we will analyze how the tax system, with special reference to the Value Added Tax (VAT), not only enervates the economic effects of the program, endangering its continuity in the beneficiaries, but also increases inequality and class separation.

### **Regressive Taxation: The being behind the seeming**

Taking as a basis that in Argentina CMT programs and subsidies are financed from a tax system that requires an urgent reformist reengineering, since it collects according to an unequal logic, which discourages productive capital and generates ever-deeper gaps in society (see Rezzoagli and Gamberg, 2015), is that we can begin to develop the contradictory logic between a detractive system that causes, materially in this transfer of private resources to the public sphere, social cracks, and from whose collection result the funds that are subsequently used in programs and subsidies that have the purpose of trying to correct said inequities (which is canceled in its reparative potential by the following tax effect), a situation that is reproduced in each fiscal period.

Therefore, one of the key elements for the proper functioning of these financial programs, beyond the coordination and adequate articulation of the State, is the need to promote a tax reform that accompanies social objectives throughout the country, taking into consideration regional differences and needs (ECLAC, 2015).

The tax structure in Argentina, as in the countries of the continent, does not present characteristics of progressivity, quite the contrary, it is defined markedly regressive (ECLAC, 2016: 7-9), and it is important to highlight that there has been no attempt (real political intention) to modify this structural situation historically. We are not unaware that the notion of progressivity and confiscatory nature present severe practical problems when it comes to setting their limits, even more if in recent decades on the continent there has persisted a palpable abandonment of strengthening and perfecting direct taxes and a constant increase in consumption taxation.

A progressive system in the tax collection area is especially beneficial for countries where wealth is concentrated and where there is a palpable economic inequality, as is the case in the countries of our continent (Jiménez, Gómez Sabaini and Podestá, 2010), considered the most unequal continent of the world (ECLAC, 2016); so the improvement of the collection through income taxes and idle and unproductive assets (personal property, real estate, taxes on sumptuous items, transfer of properties, inheritances, among others) would be recommended.

On the contrary, in countries with a greater distribution of wealth (for example, reduced or moderate inequality gap and concentration of wealth, following parameters of the Gini Coefficient) it is advisable, since there is a strong structural middle class, to lighten direct taxation and establish aliquots proportional in income and mainly in consumption.

Paradoxically, in many Latin American countries, we do the opposite. Proof of this is the strengthening of taxes on goods and services, which have been a constant in recent decades, widening inequality gaps.

Taking the analysis carried out by Gómez Sabaini and Morán (2016) in Latin America, about half of the average amount of tax resources corresponds to taxes on financial and capital transactions; another important portion corresponds to recurring taxes on real estate, and the rest, mainly includes taxes on wealth or net worth; On the other hand, among the OECD countries the property tax predominates, then transactional taxes are located and, far behind, taxes on inheritance, bequests and donations (widely disseminated), as well as taxes levied on wealth net or assets (p.19).

Following this line of analysis, and taking into consideration the distribution of the tax burden by regions and group of countries, differences can be seen that are very important between said regions or groups of countries (De Cesare, 2012), and as in Argentina and others countries of the continent, we are literally moving away from normative effectiveness, which calls for **deep reflection** and awareness of the importance of adequate tax collection and the exercise of effective pressure to combat the systemic reproduction of poverty; thus, consumption taxes "represent more than 50% of the tax burden in Latin America on average, while these taxes represent 31.7% in OECD member countries" (p.7). These data, translated into simple words, mean, among other things, that the final consumer in our region has much more tax burden on their purchases than in the OECD countries, in addition to obviously significantly increasing the value of final products, with all direct and indirect effects that can be outsourced throughout the production process, job creation and local and international competitiveness.

For ECLAC (2016) in Latin America, the Gini coefficient barely drops 3 percentage points after taxes and public monetary transfers, that is, the economic inequality among the population of Latin America without State intervention and with State intervention is only three percentage points less in the latter case. This contrasts markedly with the results of the countries of the Organization for Economic Cooperation and Development (OECD), where, on the other hand, this indicator decreases 17 points after direct fiscal and financial action, that is, after State intervention to through taxes and transfers. We must understand that this is not just a simple numerical differentiation, but that this percentage difference marks a material abyss that translates into well-being, equality, poverty reduction, and ultimately, effective development of human rights.

Traditionalist tax doctrines have considered that taxes and tributes in general constitute mere financing tools of the States, through which they can fulfill their constitutionally established purposes, in other words, taxes and the detractive system in general, for the classical doctrine, constitutes a tool to provide resources to the State and then, with these resources, begin to develop public policies.

For this dogmatics, the State has certain public needs, and in order to perform them it must have a certain financing, in other words, it must collect resources (Villegas, 1999), exercising its power of empire against those administered and establishing different taxes -taxes, rates, contributions, among others-.

In fact, the most prominent positions of specialists in state capacities and regional development show that there are 3 (three) aspects or dimensions of analysis in these processes: *hardware, software and orgware*, a scheme that is considered flexible to analyze quantitative and qualitative variations and weaknesses. of state capacities (Fernández, Guemes, Magnín and Vigil, 2006). Therefore, tax resources, as well as financial ones, constitute the state hardware, which put into operation the other 2 dimensions, although with relevance of whether they are endogenous or exogenous; software is formed by human resources and orgware is made up of organizational resources (such as organizational capacity and decision-making capacity).

Although the financing of the State is of transcendental importance, these positions have little developed the true potential of the tax system, relegating it to a merely collecting function and supplying resources.

Despite this, in recent years, the importance of other functions or roles of the detractive system began to emerge, as is the case of the distributive function of income in Colombia, the expression of Serrano and Garzón (2015) is correct when they establish that: *"the need to collect taxes is none other than to achieve an adequate redistribution of national wealth in a proportional manner among all citizens"* (p. 111). Similarly, Juan Pablo Jiménez (2014) states that *"public interventions redefine the distribution generated by the economic market through instruments such as taxes and transfers, mechanisms that have a direct impact on the distribution of household disposable income [... ] and it is of major importance to alter the levels of inequality in the access to resources of the households"* (p. 25).

The collection system is not only important as an instrument to give resources to the State, but it constitutes a public policy in itself, it is not neutral and its effects impact on the social structure and in the entire surrounding state scaffolding and public and private action.



So, increasing tax revenue is key for public investment in reducing the region's historical gaps, such as markedly segregated access to quality public goods in the fields of education, health, transportation and infrastructure, but the way of obtaining these resources is equally important, due to the externalizable effects that the transfer of private wealth to the public sphere causes directly and indirectly, rather than the resource itself (result of the collection process). The public finances of Latin American countries, where we highlight the Argentine case, have traditionally been characterized by the perpetuation of a tax system whose central axis is the collection of consumption taxes and a tax policy with little or no distributional impact.

In many countries on the continent, the tax system relies mainly on consumption taxes, which are more oppressive for low- and middle-income groups (Rezzoagli and Gamberg, 2015). In addition, the region's tax systems tend to be more oriented towards labor income (either dependent or self-employed but considered captive) than capital gains or wealth accumulation, and often lack taxes on real estate and inheritance (or at least effective compliance), so that the concentration of wealth that is fundamentally idle or unproductive increases, which is even higher than the concentration of income.

Over the last few years, the Argentine political leadership has tried, through the financial system, to alleviate the social inequalities of our population by establishing a few CMT programs (solidarity or clientelistic). However, the public spending, that is not accompanied by income (re) distributive measures from the tax system ends up consolidating structural inequalities, with all the detrimental consequences that this entails for the population. *"While a society has greater social inequalities, the less opportunity it will have to survive without violence, without access for all citizens to health, education, drinking water, in short, to all the basic needs that the man to live with dignity needs"* (Serrano and Garzón, 2014: 111).

Starting in the 1990s, with the phenomena of economic opening, immediate effects were generated in State regulation, among them, the reduction of tariffs, the weakening of many economic sectors, privatizations of public companies and reforms of the pension systems.

As a consequence, there was a growing need for the State to generate income that will replace what was lost by the generalized reduction of tariffs. Indeed, according to studies carried out on fiscal evolution (Bello and Jiménez, 2009), it is highlighted that since the date indicated above, in Latin America a greater concentration of tax revenues has deepened, mainly in VAT, to which Gómez Sabaini and Morán (2016) call *"the great collector"* (p. 7), throughout the continent, and secondarily in the Income Tax.

### Fiscal decisionism and strengthening of VAT

In Argentina, as in many developing countries, there is a tax system based mainly on indirect taxes (Felices, Guardarucci and Puig, 2016) focused on taxing the consumption of the population. Among these, the one that currently has the highest prevalence is the Value Added or Added Tax (VAT), which is regulated by law 23,349, sanctioned on 8/7/86, however, it came into force as of its approval by decree 280/97, published in the Official Gazette on 3/26/97, replacing the first VAT law No. 20,631 of 1973. Said law 23,349, since its creation, has had innumerable modifications that continue to be made to this date. It is the most generalized tax in Argentina, since it is present in practically all transactions for the purchase and sale of goods and services, it has a general rate (21%) and a differential treatment for some goods and services, -such as bread and milk- have a differential rate of 10.5% and some services -such as telecommunications- have a 27% rate.

The VAT scheme within the Argentine tax system generates severely regressive effects with respect to per capita family income. Although, the establishment of a uniform rate for all taxpayers would conceptually imply the conception of a proportional tax, it materially configures the projection of a regressive tax since, by not taking as an objective parameter the taxable capacity of the legal recipient of the tax, this generates in practice, a higher fiscal pressure or tax burden on the persons with the lowest income of the deciles (from now on population sectors). In other words, VAT is charged to everyone equally; so that the fee paid is not related to the economic capacity of a taxpayer.

Num (2016) establishes that *“the total of taxes on consumption doubles what is collected for profits, and places Argentina above the average for Latin America, evasion is high and difficult to combat. If evasion falls to the levels it reaches in Chile, for example, the general rate of 21% could be lowered by between 6 and 8 percentage points”*(p. 1). In this context, a subject with less economic capacity (for example, in a situation of poverty and dependent on CMT) compared to one who does enjoy a good economic level, will pay exactly the same amount of money for the tax, and obviously for the first individual, the effects on the personal economy are more severe.

In the most vulnerable group of this "proportional" tax are the beneficiaries of Conditional Money Transfer programs, where the continuity of this logic persists: the beneficiaries of financial help turn out to be those who are most affected by the regressive nature of the tax. That is why we consider it essential to keep this panorama of reality in mind when projecting possible changes in the structure of the tax itself, or regarding qualifying differential situations for different subjects (principle of Equality).

To mitigate the adverse effects that are generated on the trajectory of household consumption, some countries implement tax structures that minimize the regressivity of the tax based on the classification of goods into consumption groups: each of them has a differential rate taxing to a lesser extent those basic necessities, and to a greater extent luxury goods.

Based on these premises, we can classify VAT as a highly regressive tax that mainly affects people with lower income in the population.

### **Disposable Income**

As mentioned above, in the design and configuration of the Value Added Tax it is essential to consider not only the taxable capacity of the subjects obliged to pay, but also to broaden the focus of analysis to include disposable income.

We consider this concept to be of crucial importance since, if it is not taken into consideration, it generates serious deterioration in people's purchasing power and saving capacity.

This disposable income, from the point of view of economic theory and taking the conceptualization of the System of National Accounts of the Argentine Republic in 2016, is the maximum amount that a household or other unit can afford to spend on consumer goods or services during the accounting period, without having to finance their expenses by reducing their money, having other financial or non-financial assets or increasing their liabilities.

Camelo (1998) refers to disposable personal income as the sum of primary income (compensation of employees, business income and property income) plus secondary income from current transfers minus expenses for: a- Taxes on income and wealth, including fines, b- Contributions to social security systems, including by self-employed workers, c- Transfers to non-profit institutions, to other households, to the government, etc., d- Interest and land rent, e- Donations and transfers to other households, the government or non-profit institutions serving households.

For interpretive purposes, the concepts of "adjusted disposable income" and "household savings" deserve mention. Regarding the first one, we say that it is obtained by adding disposable income plus social transfers in non-monetary aid, while the second one is the difference between disposable income and consumption expenditure, or between adjusted disposable income and actual consumption (defined as the sum of consumer spending plus the value of social transfers in monetary aid).

Considering that our unit of analysis is the household, it becomes necessary to contemplate what is understood by this term and how the variables of income and taxes are estimated, thus, the number of people who jointly occupy a living place or part of it and consume under the same budget can be understood as a household. The information is collected from the estimation of the mentioned variables at the individual level, to later consolidate it at the household level, using the individual-household link presented in the surveys. Likewise, it represents units of analysis defined in such a way that they are useful, not only for the measurement of income but also for studies on the well-being and consumption of the population.

In a family, this income is considered as the sum of the income of its members and depends on the number of members that make it up (household size) and on their characteristics such as their age, sex and level of education. For the household, the most important characteristics are those of the greatest contributor, the head of the household, and the spouse.

Once these concepts are defined, and knowing how necessary a VAT reform is, because in Argentina it has a marked regressive effect, it is pertinent to emphasize the fact that not only it is necessary to consider the taxable capacity in terms of “what a person earns” before tax expenses are deducted, but it also deserves fundamental importance to be considered at the time of the configuration and design of a certain tax - in our case VAT - the disposable income of taxpayers.

### Conclusions

Although the strengthening of the VAT in Argentina is framed by structural endogenous failures of the Administrations and government entities, such as the low operational capacity and structural inefficiency, fundamentally of the tax administrations and local governments (such as, for example, the updating of a cadastre registry, systems and reliable databases) coupled with the circumstances of clientelist federalism where political arrangements prevail over economic efficiency and nobody assumes a political cost, the situation of perpetuation of inequalities and privileges requires immediate and decisive actions.

The VAT is the greatest tax collector in Argentina, and it appears that only the result of the process matters and is sufficient for the decisional actors of public affairs (political interest to maintain competitiveness and electoral legitimacy), since in recent years there is not even a real intention to at least try to lower the rates of tax evasion, what could happen with the implementation of coherent and comprehensive reforms, since without these, the Administrations move within their own parameters and rules which does not allow a change in the situation.

In any case, and although evasion could be reduced, and therefore the same or similar tax resources could be obtained by lowering the rate valid until today (due to the consequent increase in taxed activities), we would continue to propose a form of taxation typical of countries that have low or moderate inequality of social classes and purchasing power.

In a country like Argentina, belonging to the most unequal continent in the world, it is essential to begin to be, and not to seem: As there are sharp asymmetries between the rich and poor social classes, it is impossible that the fiscal sacrifice in a consumption tax scheme does not result in a perpetuation of these inequalities; Since the vulnerable sectors are those who receive the most tax incidence, different is the case of other countries and regions that have characteristics different from those mentioned above and where a fiscal scheme of this nature can be justified taking into consideration the economic capacities that comprise it (countries with a main structural middle class, where the tax sacrifice is homogeneous).

Undoubtedly, and as it was demonstrated in the present study, the perpetuation of these taxes affect with greater implication and severity the vulnerable population sectors, regardless of whether from the financial system, governments in turn have claim to help with grants and CMT programs. The case of the CMT Universal Child Allowance is paradigmatic (leaving aside structural issues such as who pays the subsidy, or who articulates and faces the costs of the conditionalities that the beneficiaries must prove), since if the purpose is to break intergenerationally with the scourge of poverty through health care for children and education to enable healthy and trained young adults to enter the labor market, then the economic resources should serve to guarantee at least access to an adequate diet that enhances the capacities that the State seeks to promote in each child and young beneficiary; However, as the measurements of consumption in the last years show and we have analyzed in the introduction of this paper, the possibilities of a quality diet in these population sectors are increasingly restrictive, and the reduction of consumption as the need for looking for cheaper alternative products (generic brands) and even the flat and simple substitution of products of basic need to face costs (stop buying milk for example) should be reflected in the fact that the State should not remove taxes that financially grants for the achievement of purposes that are a “seem”, but in this way never a “being”.

Taking in consideration the tax burden analyzed in this scientific study, we can conclude that a structural change is necessarily required. However, in a country of patches, where the tax sharing system should have ended in 1996 and replaced by a convention law and where there is justification to contradict the letter of the Constitution with respect to the own and concurrent powers of the different governments in tax matters, an immediate solution, which could be given through a legislative patch or, better still, a presidential decree, should be, and considering that there is certainty that the total of this CMT is entirely disbursed by its beneficiaries in basic consumption, the granting of an additional amount of money equivalent to the average that is taxed to the State in terms of consumption taxes (mainly in VAT, but also regional governments should contemplate the return of an average amount to the Gross Income Tax) so that with this situation these beneficiaries are considered a group incentivized by tax credits or tax refunds, because formally they cannot be exempt subjects as they are not registered responsible. It is time to start BEING, to fight against inequality and social exclusion.

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## Radical youth communities in the virtual space

### Comunidades radicales de juventud en el espacio virtual

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#### Abstract

Virtual space (Internet space) is a universal cross-border environment in which a considerable number of topics and concepts of destructive orientation among young people circulate and are popularized generated. The Internet has become one of the most important and effective means of communication in the modern world. Virtual communities usually become actors in information as well as political processes. The article deals with youth subcultural communications in radical Internet communities. First of all, these communications are based on concepts and patterns that arise in connection with the establishment as well as the implementation of xenophobic views and teachings. Political, ideological, racial, national, or religious hatred against any social, religious, or ethnic group, the promotion of homicidal scenarios, or even auto aggression becomes a pivotal key in consolidating users in such destructive communities. Overall, it can be concluded that the development of adverse opinions of communicative behavior relevant to other participants in virtual communities may well result in an enhanced sense of collective identity.

**Virtual Space, Youth, Conflicts, Youth Subcultures, Destructive Communities**

#### Resumen

El espacio virtual (espacio de Internet) es un entorno universal transfronterizo en el que circulan y se popularizan un número considerable de temas y conceptos de orientación destructiva entre los jóvenes. Internet se ha convertido en uno de los medios de comunicación más importantes y eficaces del mundo moderno. Las comunidades virtuales suelen convertirse en actores tanto de la información como de los procesos políticos. El artículo trata sobre las comunicaciones subculturales de los jóvenes en las comunidades radicales de Internet. En primer lugar, estas comunicaciones se basan en conceptos y patrones que surgen en relación con el establecimiento y la implementación de visiones y enseñanzas xenófobas. El odio político, ideológico, racial, nacional o religioso contra cualquier grupo social, religioso o étnico, la promoción de escenarios homicidas o incluso la autoagresión se convierte en una clave fundamental para consolidar a los usuarios en comunidades tan destructivas. En general, se puede concluir que el desarrollo de opiniones adversas de comportamiento comunicativo relevantes para otros participantes en comunidades virtuales bien puede resultar en un mayor sentido de identidad colectiva.

**Espacio Virtual, Juventud, Conflictos, Subculturas Juveniles, Comunidades Destructivas**

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## Introduction

The concept of "community" is the basic one for this study. In the social science of the XIX-XXI centuries, the concept of community has undergone an evolution. At first, "community" was understood as territorial and geographical proximity, kinship relations. Gradually, "community" became understood as a structural community of individuals communicating within social networks.

The term "community" was a key one in M. Weber, E. Durkheim, and K. Marx. However, sociologists and anthropologists had different theoretical models of community. They put different meanings into the definition of community. Often in theories, the concept of "community" was associated with social rituals. This approach was observed in the works of Durkheim and Tönnies (Tönnies, 1965; Abdi, & Basarati, 2018; Gonsalves *et al.*, 2020).

The Russian sociological encyclopedia gives the following definition: "Community-an Association of individuals who have common goals" (The Russian sociological encyclopedia. - Moscow: Norma-Infra, 1998). We must admit that the concept of "community" is one of the vaguest sociological terms, which is interpreted differently in scientific works. The use of this definition is possible if the study specifies explicitly what is meant by it.

The formation of the "information economy" and the development of telecommunications networks requires a re-evaluation of the role of communities as primary units in the social hierarchy of society. From sociology, the term "communication" is considered as the organization of socio-cultural and economic interaction of people, groups, organizations, enterprises, States, and regions using information tools (Bondarenko, 2004).

In the 80s of the XX century, the first works of Western researchers on the problems of virtual network space appeared. S. Hiltz and M. Taroff were among the first to note the fact of the formation of a new social structure of society, mediated by computer technologies (Hiltz & Turoff, 1993, LaPadula *et al.*, 2020).

The operation of virtual network communities in a social and technical environment or cyberspace. This environment has tremendous differences from the everyday physical environment. When considering the social structure of virtual network communities, it is necessary to describe the very environment in which social interactions occur.

According to social anthropologist Brian Pfaffenberger, virtuality is not a "new reality", but a part of everyday human life. Virtuality is social, so it is correct to use the term "social virtuality" (Pfaffenberger, 1992; Ventura Ccasa, 2021).

Communications of participants of thematic youth groups in the op-line and offline space have both points of divergence and points of contact. It is the virtual space that expands the possibilities of communication, leisure, mobility, and accessibility of various types of thematic youth groups. On the other hand, attribution of belonging to the youth (primarily destructive) subculture in the offline space is optional, and important is the problem of identifying "friend-foe," identity and marking "correct and incorrect" information (concepts) in the network space by participants. An essential part of our research will consider transforming the transition of destructive youth-subcultural from the real to the virtual space (Ivanov, 2017; Farzadnia, & Giles, 2015; Nalani *et al.*, 2021).

## Literature review

Different writers have tended to the subject of this article from alternate points of view. As per Preece (in Kardaras 2003), a virtual local area comprises of:

- People who collaborate socially as they endeavor to fulfill their own necessities or perform social roles, like driving or directing.
- A common perspective, like an interest, need, data trade or administration that gives motivation to the local area.
- Policies as implied suspicions, conventions, decides and laws that guide individuals' communications.
- Computer frameworks to help and intercede social cooperation and encourage a feeling of harmony.



Gonsalves *et al.*, (2020) characterizes virtual networks as gatherings of individuals connected not by geology but rather by their support in PC organizations. They share a large number of the qualities of individuals in normal networks, yet have no vis-à-vis contact, are not limited by the requirements of time or spot, and use PCs to speak with each other. The term 'local area' is utilized in a more broad sense than in sociological examination where sharing convictions or a sensation of having a place with a similar local area is viewed as fundamental for review a gathering of people as a local area. Kyrnin (2003) utilizes the WWWebster Dictionary meaning of local area to characterize the idea 'virtual local area': the primary necessity for a local area is that individuals share regular interests; consequently, any individual who visits a specific Web webpage is important for the local area of that Web website. This is an expansive definition and does exclude the significant necessity of standard guests who communicate with each other and partake in data sharing. Armstrong and Hagel (in Kardaras 2003) contend that there are four local area types that reflect purchaser needs:

- Communities of exchanges encourage the requirement for purchasing and selling of items and administrations or trade of data. The individuals from the local area are urged to speak with one another to take part in exchange. The 'Virtual Vineyards', for instance, is a local area that permits members to purchase and sell wine from little grape plantations.
- Communities of interest unite individuals with a typical distraction about a point, for instance sports, vehicles, food and workmanship. These people group include a more significant level of relational correspondence than the networks of exchange. Such people group can be 'vengeance' Websites, like McSpotlight, which gives pessimistic data about McDonalds, and The Living Wages, which gives adverse data about Nike (Nalani *et al.*, 2021).

Different people group of interest, for example, the email discussion for Mercedes Benz fans (Easley n.d.) give generally certain data about items and, if pessimistic data is given, the point is to improve the items or administration.

Tosun (2012) states that the principle utilized for Facebook incorporate keeping up long-distance connections, game playing/amusement, photograph -related exercises, putting together get-togethers, latent perceptions, building up new fellowships and starting/ending close connections (Tosun 2012:1512; Ventura Ccasa, 2021). Tosun contends that communicating one's self on the Internet is an approach to frame cozy associations with individuals that are met through interpersonal interaction website and that clients use Facebook as a social substitutes to make disconnected connections and reinforce existing connections (Tosun 2012:1512). Subsequent to examining the information, Tosun inferred that Facebook is a support for those with issues articulating their contemplations and sentiments face to face and is utilized as a substitute for building up connections (Tosun 2012:1517; Gonsalves *et al.*, 2020). The thoughts inside the Tosun article seeing Facebook as a social substitute to make connections upholds the hypothesis inside this exploration that more mingling is happening in the online circle. By making an online personality, which is utilized to make these fellowships with others, the client is taking part in the particular cycle of character arrangement talked about in the previously mentioned articles. At the point when these connections are then taken into a disconnected situation, the client expects the part of beneficiary online personality and plays out the character that their partner has come to know, acknowledge and comprehend.

Acquisti and Gross (2006) contend that there is frequently a distinction between understudies' longing to secure protection and their practices, a topic that is likewise investigated in Stutzman's (2006) overview of Facebook clients and Barnes' (2006) portrayal of the "protection Catch 22" that happens when teenagers don't know about the public idea of the Internet. In breaking down trust on interpersonal organization locales, Dwyer, Hiltz, and Passerini (2007) contended that trust and use objectives may influence what individuals will share—Facebook clients communicated more noteworthy trust in Facebook than MySpace clients did in MySpace and along these lines were more able to share data on the site. In another examination inspecting security issues and SNSs, Jagatic, Johnson, Jakobsson, and Menczer (2007) utilized uninhibitedly open profile information from SNSs to make a "phishing" plot that seemed to begin from a companion on the organization; their objectives were significantly more prone to part with data to this "companion" than to an apparent outsider.

Study information offer a more idealistic point of view on the issue, recommending that youngsters know about potential security dangers on the web and that many are proactive about finding a way ways to limit certain expected dangers. Seat tracked down that 55% of online youngsters have profiles, 66% of whom report that their profile isn't noticeable to all Internet clients (Lenhart and Madden, 2007; LaPadula *et al.*, 2020). Of the youngsters with totally open profiles, 46% revealed including probably some bogus data.

## Methods

The transition to the information society has significantly accelerated the pace of social processes. The world computer network has destroyed the space-time boundaries and allowed an almost uncontrolled exchange of content and communication actions. In this situation, it is quite challenging to localize youth extremism.

The majority of Internet users are representatives of the youth environment. Young people are hyperactive users of social networks who get most of their information from the Internet. The Internet surrounds and affects them everywhere: you can access the virtual network using various gadgets and devices. A serious circumstance is a fact that the worldview of teenagers and young people is still at the stage of formation and development. On the other hand, we must admit that one part of people lives in the real world, and the other considers the virtual world to be the real world. This parallelism between the real and the virtual is seen in the generational conflict between young users of the Internet space and the generation that did not find this information and technology boom and such virtual vryamepravlenie at least perceive warily. It should be taken into account that the Internet, with its massive range of opinions and views, sometimes having an unethical or destructive character, can pose a real danger. This applies primarily to those portals and forums that are created to promote ideas of terrorism and extremism with racial background. Virtual people group comprise of individuals with a common perspective who impart and share data by methods for electronic organizations. Virtual people group are essential for the data age and the data economy. In view of the straightforwardness and speed with which data can be dispersed through virtual networks, they present the two chances and dangers to organizations.

The ramifications for organizations are that they should misuse the chances by making virtual networks of training and client networks. In spite of the fact that organizations can't handle data dispersal in online networks, they can limit the dangers to their standing by ensuring they realize the thing is being said about their items and administrations, and by partaking in online networks. From the different meanings of virtual networks, unmistakably correspondence, and subsequently sharing and 'exchanging' of data, is the general purpose of being essential for a virtual local area. Various sorts of virtual networks can be recognized, in view of on individuals that make up the networks, or the reason for which the local area is made.

The idea of informal organization, first begat in 1954 by J. A. Barnes in, has been in a field of investigation of current social science, humanities, geology, social brain research, authoritative examinations and software engineering for most recent couple of many years (Barnes, 1954:39; LaPadula *et al.*, 2020). The idea of interpersonal organization and informal community examination have been produced for some areas, for example, corporate association organizations (law association), researcher or different callings joint effort organizations, family organizations, companionship organization of understudies, organization chief organizations, sexual contact organizations, client organizations, work market, general wellbeing, brain science, and so forth As of late, it turns into a piece of the new control of science called computational sociology (Lazer *et al.*, 2009 : 721). With the development of the Internet and the expanding prominence of social and communitarian registering, as of late usually called social figuring, interpersonal organizations have arisen as a huge and promising field of study inside software engineering. Social figuring includes such exercises as gathering, removing, getting to, preparing, registering, and envisioning of all sort of friendly data (King, 2010:482; Nalani *et al.*, 2021).

An informal communication administration (SNS) is an Internet-based stage utilized in building and creating social relations among individuals. It gives implies by which clients can interface online with individuals of comparative interests, regardless of whether it be for heartfelt or social reason. It permits clients to share messages, texting, online remarks, wikis, computerized photographs and recordings, and post blog passages.

It additionally offers individuals with handicaps an opportunity to spread the word about their musings and suppositions in a virtual climate. Informal communities serve double parts as both the providers and the customers of substance. They give the client a decision of who can see their profile. A profile is created from answers to questions, like age, area, interests, and so forth. A few locales permit clients to transfer pictures, add interactive media content or change the look and feel of the profile, post web journals, remark on postings, accumulate and share rundown of contacts. To secure client protection, informal communities regularly have controls that permit clients to pick who can see their profile, reach them, add them to their rundown of contacts, etc (Matthew *et al.*, 2019: 126; Ventura Ccasa, 2021). Informal organization destinations additionally give rich wellsprings of naturalistic social information. Profile and linkage information from SNSs can be accumulated either using robotized assortment procedures or through datasets gave straightforwardly from the organization, empowering network investigation analysts to investigate enormous scope examples of friending, utilization, and other obvious pointers (Hogan, in press), and proceeding with an examination pattern that began with assessments of online journals and different sites. For example, Golder, Wilkinson, and Huberman (2007) analyzed an anonymized dataset comprising of 362 million messages traded by more than 4,000,000 Facebook clients for knowledge into Friending and informing exercises. Lampe, Ellison, and Steinfield (2007) investigated the connection between profile components and number of Facebook companions, finding that profile handle that decrease exchange costs and are harder to adulterate are well on the way to be related with bigger number of kinship joins. These sorts of information additionally loan themselves well to examination through network perception (Adamic, Buyukkokten, and Adar, 2003; Heer and boyd, 2005; Paolillo and Wright, 2005; LaPadula *et al.*, 2020).

Social networks and the blogosphere are the same manifestation of a mass character, the same psychology of the street crowd. Here, however, the coverage is significantly more significant, and the rate of dissemination of toxic information is much higher.

It is necessary to take into account the stereotype of the behavior of the majority of users who see a bright, catchy title associated, for example, with an ethnic crime, click on the button "repost", "retweet", or "share". In other words, the process of spreading rumors, and here we can say extremist content that is brightly decorated, turns into an uncontrolled phenomenon.

The phenomenon of virtual sociality makes it possible to invent your own identity: ethnic, gender, material, and legal, to create a self-presentation of your political views. It is the realization of what individuals think of themselves, not what they are in reality. Virtual masks-avatars replace the physics of the face, nicknames symbolize the inner content that the subject of the network attributes to itself, the inner world is filled with the help of network political exchange of information. Identity can be continuously updated and changed in the virtual space. Age, gender, social status, and political beliefs that cannot be transformed by an individual every day in real space are constantly being constructed in virtual space. The consciousness of the average user of social networks has a clip character, which does not want to tire itself with long texts and tries to form ideological attitudes through a bright video series, slogans, demotivators, and memes that are emotionally charged and through constant reference to them create stable stereotypes. There is a fundamental social problem, which is that a generation has grown up that can no longer imagine their life without virtual space, constant Internet surfing, and social networking. In these conditions, new virtual leaders appear who create network policies and force real actions (Kiselev, 2007; Ventura Ccasa, 2021).

The Internet space allows you to express yourself in various role-playing opportunities to determine your own path of development. As practice shows, the violation or destruction of real social ties leads teenagers to leave the world of virtual communication. The ability to quickly mobilize the Internet community and a significant number of participants in communication and bring the confrontation to the public view of virtual conflicts that entail certain evaluative opinions increase the acuteness of the communication itself and its consequences.

In the interpretation of anthropologist Marshall McLuhan, media is understood as extensions of the human sense organs: sight, hearing, and touch. Social networks are a projection of human organs.

The network as a media is an extension of the human sensory world. In other words, online sociality is a modified offline sociality (McLuhan, 1964). The new virtual sociopathies are just a network extension of real-world sociopathies. Questions with the definition of ethnic identity and identification of "pure races" usually end in virtual sociopathy, where hostility towards "Strangers", who are identified primarily with migrants, begins to manifest itself (Ivanov, 2017; Nalani *et al.*, 2021).

Overall, this study seeks to analyze radical youth communities in the virtual space. Hence, to fulfil that aim, a descriptive method is utilized to gather and analyze needed data. Besides, the authors attempt to analyze General trends in the Internet to expand and update the relevant data.

Online sociality should be considered as a different kind of sociality, where the possibility of translating these relationships from the network into real everyday life is not excluded. The connections existing on the Internet can be grouped from various perspectives and dependent on various qualities (Figure 7):

- Active subject that is answerable for formation of new connections (client, framework, client and framework).
- Awareness of the clients that they are engaged with connections.
- Mutuality of the association between clients (awry, balanced, reflexive).
- General relationship sources (outside or virtual world).
- Data type utilized by the framework for relationship creation (direct cooperation, normal movement, client profiles, none if the relationship is made by client).
- Nature of connections (proficient, family, kinship, colleague, normal interest, and so forth).
- Visibility of connections for the clients (completely or part of the way obvious, imperceptible).
- Directness of relationship grounds (immediate, semi-immediate, backhanded) (Beyene, 2008).

## Results and discussion

The Internet is changing the manner in which we work, unwind, communicate ... it is changing the way we live. The virtual local area is one of the better approaches for collaboration that has been made conceivable by the Internet. Catch, stockpiling, dispersal and age of (new) data happen rapidly and viably in virtual networks on the grounds that the Internet empowers simultaneous and nonconcurrent correspondence in an unexpected way. Virtual people group are relied upon to develop into a deliberately significant plan of action. They along these lines have certain ramifications for organizations. From one perspective, there are advantages and openings: organizations can improve client support and client relations and all the more effectively spread data and virtual networks can likewise go about as discussions for information sharing, learning and coordinated effort. Then again, virtual networks can be utilized to disperse negative data about an organization that can hurt its standing, prompting loss of clients. The ramifications is that organizations need to observe virtual networks and decide how they can utilize virtual networks for their potential benefit just as limit the dangers presented by virtual networks (Buhmann, 2003; Gonsalves *et al.*, 2020). Albeit the investigation of virtual networks is in its earliest stages, it has effectively pulled in light of a legitimate concern for specialists from various controls and points of view, including PC interceded correspondence (Herring, 2002), ethnography (Rice-Levy, 1994; Ward, 1999; William, 2000), social organization examination (Wellman and Gulia, 1999), social financial matters (Kollock, 1999), humanism (Fox and Roberts, 1999), and data science (Burnett, Besant, and Chatman, 2001; Romm, Pliskin, and Clarke, 1997; Nalani *et al.*, 2021). The issues associated with considering virtual networks are not insignificant; issues incorporate the fittingness of the strategies utilized (Ward, 1999), moral issues associated with such investigations (Menon, 1998), and the possibly negative impacts on the virtual networks (Smith and Kollock, 1999; LaPadula *et al.*, 2020). All things considered, virtual networks give freedoms to scientists to examine the conduct, or discernments, of scattered networks continuously, just as over the long run, something that was troublesome, if certainly feasible, before the coming of the Internet and the WorldWide Web. Investigation of virtual networks may likewise offer bits of knowledge into the discernments and activities of actual networks through investigations of their virtual partners.

The utilization of arranged virtual networks to help learning in advanced education has been looked into by Wachter, Gupta, and Quaddus (2000).

A representative of radical groups is usually a young man of 16 -28 years old, who is interested in neo-pagan projects and runic writing. More often a student of technical or natural science fields than of Humanities. Quite often, you can see the evolution from moderate radical groups in social networks to openly right-wing ones with an outright Nazi program. Ridings *et al.* (2002: 273) offer an extensive meaning of the term (virtual local area) that accepts the credits examined above: (gatherings of individuals with normal interests and practices that convey routinely and for some length in a coordinated manner over the Internet through a typical area or component.) This definition is utilized in this examination. Instances of virtual networks are announcement sheets where similar individuals come, consistently, to talk about normal interests, for example, battling bosom malignancy, gathering old-fashioned containers, or the issues of claiming a Saber boat. Since people group enrollment has not been unequivocally characterized in the writing and since the normal use of the term (enrollment) manages individuals who don't effectively add to the local area yet at the same time partake, even quietly, in its exercises, this examination characterizes a part as any individual who take an interest the virtual revolutionary organization local area is more appealing to the client. Moreover, it is United and stable in the virtual space. Social characteristics of communities, with their racial ideologies and mythologems, to which users of this group are loyal, are a marker for determining and graduating participants according to the principle of "Own" and "Alien". Constant communication practices create a collective "We", that is, a shared identity. In the virtual space, it is possible to create collective identities that are both constructive and destructive (Ventura Ccasa, 2021).

The collective identity of a radical in virtual space can be formed in three stages.

Initially, during the initial socialization, the newcomer is influenced by the collective identity of the group, but the individual identity also affects the collective one.

The second stage for an actor is participation in the formation of a collective identity.

At the third stage, the actor, in communication with representatives of other groups, translates the collective identity, and only then the individual identity. Further, it is possible to switch to more radical groups that promote power actions.

Collective identity is not limited to the factors of psychoemotional attachment to the community on the part of the user but also includes cognitive and evaluative moments. So, when talking about collective identity, it is necessary to emphasize the commitment to group-wide social values and solidarity in defending common ideals. Group identity in virtual communities is an essential mechanism for preventing external threats and reducing intra-group conflicts. Only identifying yourself with other members of the community creates a sense of belonging to the group, and if there are conflict situations, it makes you rise above your interests.

## Conclusions

Over the course of the study, it was tried to analyze youth subcultural communications in radical Internet communities. As mentioned before, these communications are on the basis of concepts and patterns that arise in connection with the establishment as well as the implementation of xenophobic views and teachings. A descriptive method and data-gathering method over the Internet were utilized to complete the aim of the study. Based on the results acquire, it can be concluding that the formation of negative attitudes of communicative behavior relative to other participants in virtual communities leads to an increased sense of group identity. This is typical for representatives of radical virtual network communities.

On the other hand, the system problem was the "simulation" of social reality, the creation of a "parallel reality" that Zh. Baudrillard (Jean, 1981). Many social phenomena of this object world, passing from objective reality to virtual, mutate, that is, acquire new features and features.

An analysis of General trends in the Internet in recent years shows that social networks have become the leading virtual platform for promoting radicalism, and there are a number of reasons for this.

First, a huge human resource is initially concentrated here.

Secondly, creating and promoting a theme group requires significantly less time and financial expenses than for promoting an individual site.

Third, the loyal policy of the administration of some social networks to the content posted and promoted.

The conflictogenicity of virtual space is most clearly manifested in social networks, due to the fact that they are a kind of projection of real communications, as well as socio-economic and political events in society. The General availability of social networks contributes to the mass Association of people in whole communities, which form the unity of their ideas and opinions on various grounds, which may not always be constructive and legitimate. Such forms of collectivism create relevant platforms for the implementation of virtual conflict. The mass of the Internet audience is attractive for administrators of certain banned or most aggressive communities, not only by the possibility of attracting new like-minded people but also by searching for "enemies of the community".

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What is your added value with respect to other techniques?

Clearly focus each of its features

Clearly explain the problem to be solved and the central hypothesis.

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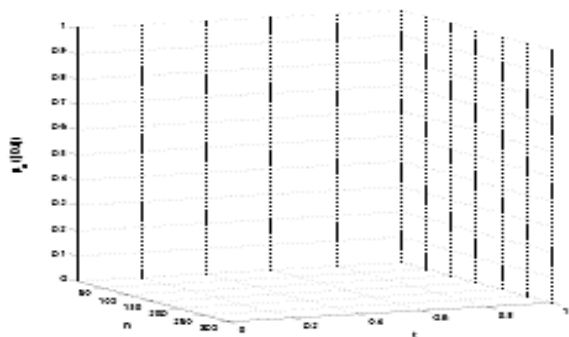
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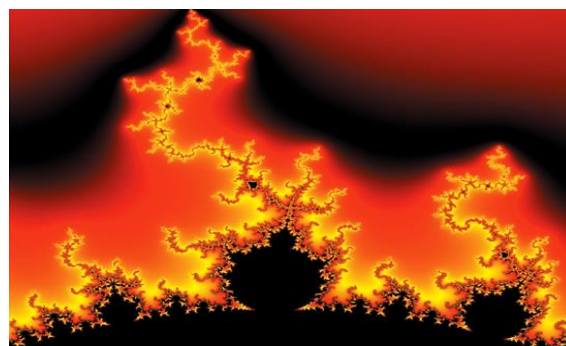
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