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Exploratory factor analysis of the Family Integration Inventory in a sample of workers from Arequipa City

Análisis factorial exploratorio del Inventario de Integración Familiar en una muestra de trabajadores de la ciudad de Arequipa

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Abstract: This article describes the psychometric properties of the Family Integration Inventory. The sample was conformed by 420 people and the participants were selected through an intentional non-probabilistic sampling. The results indicate that the inventory has 4 factors that together explain 55.2% of the variance. Their reliability indexes fluctuate between ω=.867 and ω=.932. In consequence, the Family Integration Inventory showed to have robust psychometric properties, which has proven its validity and precision in the measurement of the family integration variable.

Key words: family integration, work-family conflict, family perspective, psychometrics

Resumen: El presente artículo describe las propiedades psicometrías del Inventario de Integración Familiar. La muestra fue de 420 personas y los participantes fueron seleccionados a través de un muestreo no probabilístico intencional. Los resultados indican que la prueba presenta 4 factores que en su conjunto explican el 55.2% de la varianza, mientras que sus índices de confiabilidad fluctúan entre ω=.867 y ω=.932. En consecuencia, el Inventario de Integración Familiar mostró tener propiedades psicométricas robustas por lo cual se ha comprobado su validez y precisión en la medición de la variable integración familiar.

Palabras clave: integración familiar, conflicto familia-trabajo, perspectiva de familia, psicometría

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Introduction

Family is a complex institution and its relevance has attracted attention of scholars who have made contributions, mainly, from the last three decades, through rigorous studies that have demonstrated with scientific argumentation the importance of that institution (Amato, 2005; Fagan, Kitt, & Potrykus, 2011; Herrera, Salinas, & Valenzuela, 2011), and how their functioning is capable of generating an important impact related to the development of societies (Bianchi & Casper, 2000; Pliego , 2012; Wilcox, 2006).

Likewise, to Corcuera (2013), family as an object of investigation can be approached from two perspectives: as a vital cell that enables a network of social relationships that introduce and affect development of individuals and the immediate social structure; here we find sociology (Ullmann, Maldonado, & Rico, 2010), demography (Pugliese, 2009; Sigle-Rushton, & McLanahan, 2002), economics (Aguirre, 2007; Muñoz, 2004) and law (Dominguez, 2007), to name a few of them, whose common denominator is an "outside" approach. The approach is as a family institution, within which the formative processes of people, constitution of character and identity of its members, and relations between its different members are gestated. It is an approach that "from within" aims to understand family dynamics, this perspective is composed of psychology (Amato, 2005), psychiatry (Rojas, 2008), education (Yaschine, 2014) and philosophy (Melina, 2009).

The family systemic approach addresses family from its structure, its relationships and its life cycle (Ochoa, 2004). In this approach family is understood as an organism that goes through different stages of development and faces crisis in every period of its life. Ríos (2005) points out that the stages of the family's life cycle are: formation of the couple, which implies learning negotiation guidelines to harmonize and balance coexistence, and define the marital roles; family with young children, which implies a normalization of parental roles; family with teenage children, which involves the rearrangement of these roles; and the family with adult children, when the children leave home, and the couple rethinks their conjugal roles.

Nowadays, however, a variable which affects family functionality, and that is not typical of the family cycle, is the family-work conflict, which assumes how family dynamics affect work performance; or also known as work-family conflict, when labor demands affect family harmony (Guerrero & Puerto, 2007). In this situation, Quiroga and Sánchez (1997) have reported in the case of men, family in certain contexts and circumstances can become a potential generator of labor conflicts, while for women, dealing with family responsibilities and obligations at work could generate greater personal dissatisfaction. These data would be suggesting how the described phenomenon would be affecting both spouses, but each one with its nuances and particularities.

In that sense, there are several factors that have caused the family-work conflict to become increasingly accentuated in recent years, such as massive labor insertion of women, balance of intrafamilial roles of men and women, and changes in the organizational structures mediated by technology and the new paradigms of human talent management (Rubio, Osca, Recio, Urien & Peiró, 2015). Furthermore, measures are being taken in various countries to reduce the impact of family-labor conflict on workers, such as having staggered salaries based on family burden, having more flexible hours, granting greater labor benefits during the paternity period and motherhood, etc. (Kampowski, & Gallazzi, 2015). Reduction of the tax burden based on the number of dependent members in various laws is also a reflection of the political interest of many societies (Hertfelder, Martínez-Aedo & Velarde, 2011), as well as the emergence of the international certification Family-Responsible Company (EFR) that seeks to make visible and assess the effort of business management, with integration of the family-work binomial as its axis. However,

despite its relevance and the growing interest that this issue entails, in Latin America and particularly in Peru, there are few studies on family and work variables.

Some of these studies have reported how family structure has an important impact on the satisfaction of family needs (Riesco, & Arela, 2015), and how family structure is related to well-being and satisfaction in life of families and their members (Castro, Riesco & Arela, 2016). Although number of family members is usually negative related to the satisfaction of material needs of their members, Castro's studies indicate that when both spouses contribute financially to family economy, living conditions of their members improve in education, as in health, well-being and material living conditions (Castro, Rivera & Seperak, 2017).

Hence, if family members are harmoniously integrated, the family-work conflict is usually reduced, but if there is greater intra-family or marital conflict, family functionality and labor productivity decline. In a study conducted in couples working in Lima (Peru), it was found in the case of men, emotional satisfaction is essential in the dyadic adjustment, while for women intellectual factor is more decisive in the adjustment with their partners when both meet family and work roles (Prado & Del Águila, 2010). In a local study it was found socioeconomic factors that are related to family integration such as level of economic income, socioeconomic level and degree of parental education (Castro, Arias, Dominguez, Masías, Salas, Canales, & Flores, 2013).

Thus, we have proposed the concept of family integration, which is defined as "the degree of health, balance and harmony of relationships that are born from the conjugal bond and naturally aims to satisfy the need for personal transcendence based on respect, dialogue and the communion among its members considering their responsibilities, according to the life cycle of the family" (Arias, Castro, Dominguez, Masías, Canales, Castilla, & Castilla, 2013, p. 196).

Family integration is not a novel concept. Although it is used with some frequency, in the academic field, its conceptual and theoretical scopes have not been defined. In this way, this construct primarily comprises the level of equilibrium of relationships between different family members (Arias, 2012). In addition, family integration covers couple relationship, paternal-filial relationship and fraternity relationship (Minuchin, & Fishman, 1996), which in turn are based on various types of links between their members (Hellinger, 2005), and which determine family subsystems (or holons), hierarchies, roles and boundaries; which lead them to differentiate from each other (Bowen, 1998). Therefore, family structure is essential to understand family dynamics and integration among its members. In that sense, the bibliography consulted indicates significant impact of the type of family structure in reference to various welfare factors both for the couple and for the development of the children, such as health, safety, functionality, income level, job opportunities, satisfaction of interpersonal relationships (Pliego & Castro, 2015), academic achievement of children (Arias, Quispe, & Ceballos, 2016) and economic development of family (Riesco, & Arela, 2015).

Taking into consideration the conceptual scopes aforementioned, an inventory was designed to assess family integration, which has adequate psychometric properties. After its application in 334 residents of Arequipa city in Peru, it was reported that it has a reliability index of .739, obtained by the method of internal consistency with the Cronbach Alpha test and it has a one-dimensional structure, the only one of which factor explained 29% of the total variance (Arias et al., 2013). The application of this instrument has allowed us to obtain some findings about family integration in the inhabitants of Arequipa. For example, after its application in 844 heads of household in 13 districts, it was found that the level of family integration in 62.6% of examinees was low. It was also found that level of higher education and being married, directly and significantly

predicted family integration (Castro, Arias, Dominguez, Masías, Salas, Canales, & Flores, 2013).

In another study, it was found family integration was moderately and positively correlated with happiness, and satisfaction with life. Moreover, number of children positively predicted family integration (Arias, Masías, Salas, Yépez, & Justo, 2014). In an organizational context, and within In another study, it was found that family integration was moderately and positively correlated with happiness, and that satisfaction with life and the number of children positively predicted family integration (Arias, Masías, Salas, Yépez, & Justo, 2014). In an organizational context, and within the framework of the work-family conflict, it was found time of relationship between workers and their partners was positively and moderately related to family integration. Meanwhile, family integration was negatively and moderately related with emotional exhaustion and burnout syndrome. Likewise, through the regression analysis, it was observed that when workers have a higher level of burnout, family integration increases and positively impacts on job satisfaction, so that family integration could fulfill the function of buffering certain stressful working conditions to workers (Arias, & Ceballos, 2016).

Nevertheless, a methodological limitation is this instrument has not been validated in work contexts, so it is necessary to analyze its psychometric properties in men and women who perform work and family functions. Hence, the purpose of this work is precisely to fill this conceptual vacuum. Even though there are several instruments that value family variables that have been validated in Peru, such as the Family Functionality Scale (Bazo-Alvarez, Bazo-Alvarez, Aguila, Peralta , Mormontoy, & Bennett, 2016), the Parental Styles Scale (Matalinares, Raymundo, & Baca, 2014), the APGAR-family Scale (Castilla, Caycho, Shimabukuro, & Valdivia, 2014), the Parenting Styles Scale de Steinberg (Merino, & Arndt, 2004), the Inventory of Parental Behaviors (Merino, Díaz, & Cohen, 2003), the Family Interaction Quality Scale (Dominguez, Aravena, Ramírez & Yauri, 2013), they have only been applied to school and university students, but not to householders, and even less to working householders.

In summary, there are few instruments that evaluate the family in work contexts, and those that do, adopt an “outside in” approach (Martínez-Pérez, & Osca, 2002), while the Family Integration Inventory has a perspective “from the inside”. Therefore, it is necessary to assess its psychometric properties in work contexts, since the previous analysis has reported a one-dimensional structure that does not correspond to its theoretical foundation that poses a multifactorial structure based on the various holons that make up the family (Arias, 2012). Thus, the objective of this research is to perform a new statistical validation of the test through exploratory factor analysis, but in working parents who have a nuclear family structure. Therefore, it is an instrumental study (Montero, & León, 2007).

Method

Participants

The sample consists of 420 people, married or living together, with at least two children; who live together and have formed a family nucleus. These people were selected in a non-probabilistic way, through the quota sampling technique. All were of legal age, of different socioeconomic levels and come from six companies in the town of Arequipa, from the areas of production, services and commerce.

Instruments

Family Integration Inventory. This instrument was designed and validated by Arias et al. (2013) in a probabilistically selected sample. The test is one-dimensional and consists of 52 items arranged in a Likert type stake that goes from always (5) to never (1). It is applied to any member of the couple and can be managed individually or collectively. The test has criteria for content

validity, criteria and construct. In addition, it has an adequate reliability index of .739, obtained by the internal consistency method and the Cronbach Alpha test. It also has scales in three ranges of interpretation: low, moderate and high.

Procedure

Participants were evaluated in their work centers between October 2015 and March 2016. The application of the instruments took approximately 20 minutes per person. However, in some cases, the application was collective, in small groups, in a number no more than ten people. Coordination was carried out with the authorities of the companies selected and the direct bosses of workers. At the time of the evaluation, the aims of the study were explained to participants and they signed an informed consent.

Data analysis

The analysis was conducted in two stages: in the first stage, we analyzed the univariate descriptive statistics of the items (mean, standard deviation, asymmetry and kurtosis). In the second stage, an exploratory factor analysis was carried out in order to find the factorial configuration of items, using the statistical program FACTOR version 10.5.03 (Ferrando & Lorenzo-Seva, 2017). Finally, we estimate the reliability of the inventory using the internal consistency method and the statistics of McDonald's ω and Cronbach's α using JASP software version 0.10.

Results

Firstly, the analysis of univariate descriptions was performed (see Table 1), which indicated most of the items evaluated did not have a normal distribution because they have an asymmetry and kurtosis that exceed the interval [-1, 1]. Taking into account the above and that items are ordinal, we will proceed to analyze the data based on policoric correlations (Muthén & Kaplan, 1985, 1992).

To determine the factor structure of the test, an exploratory factor analysis (EFA) was performed, whose method of determining factors to be extracted is the optimal implementation of parallel analysis (Timmerman, & Lorenzo-Seva, 2011), the method of factor extraction was the robust unweighted least squares (RULS). The adequacy of correlation matrix was first evaluated with the KMO coefficient (.947) and Bartlett's test (χ^2 = 12117.7; p <.001), which indicated the correlations were adequate to be analyzed by means of EFA. Four factors that together explain 55.2% of variance were extracted. The inter-factor correlations indicate factors are moderately correlated with each other (r> .3); therefore, an oblique rotation Promin was performed (Lorenzo-Seva, 1999; Tabachnick, & Fidell, 2007).

Table 1.
Univariate descriptives of the Family Integration Inventor

Ítems	M	DE	As	κ	Ítems	M	DE	As	κ
Ítem 1	4.45	.965	-2.103	4.143	Ítem 27	4.16	.954	-1.211	1.342
Ítem 2	4.22	1.009	-1.453	1.792	Ítem 28	4.38	.869	-1.642	2.914
Ítem 3	3.74	1.100	-.742	.094	Ítem 29	4.52	.833	-2.205	5.529
Ítem 4	3.80	1.191	-.791	-.186	Ítem 30	4.25	.921	-1.207	1.116
Ítem 5	3.92	1.154	-1.024	.345	Ítem 31	4.33	.886	-1.418	1.843
Ítem 6	3.75	1.186	-.920	.146	Ítem 32	4.36	.888	-1.509	2.062
Ítem 7	4.23	1.055	-1.599	2.145	Ítem 33	4.04	1.060	-1.027	.389
Ítem 8	4.18	1.075	-1.454	1.611	Ítem 34	3.65	1.311	-.612	-.712
Ítem 9	4.03	1.037	-1.046	.762	Ítem 35	4.02	1.056	-1.009	.474
Ítem 10	3.83	1.144	-.790	-.106	Ítem 36	4.29	.930	-1.556	2.457
Ítem 11	4.14	1.045	-1.248	1.133	Ítem 37	4.48	.827	-1.970	4.442
Ítem 12	4.13	1.059	-1.379	1.585	Ítem 38	4.47	.804	-1.826	3.844
Ítem 13	3.82	1.149	-.771	-.087	Ítem 39	4.28	.930	-1.404	1.808
Ítem 14	4.45	.914	-2.085	4.639	Ítem 40	3.87	1.094	-.891	.216
Ítem 15	4.20	.977	-1.326	1.454	Ítem 41	3.87	1.175	-1.004	.251
Ítem 16	4.36	.896	-1.685	3.137	Ítem 42	4.21	1.093	-1.535	1.728
Ítem 17	4.21	.869	-1.240	1.958	Ítem 43	3.94	1.099	-.927	.236
Ítem 18	4.39	.840	-1.615	2.956	Ítem 44	3.89	1.086	-.808	.035
Ítem 19	4.46	.782	-1.774	3.917	Ítem 45	3.85	1.138	-.776	-.150
Ítem 20	4.03	1.038	-.867	.087	Ítem 46	4.16	1.132	-1.403	1.178
Ítem 21	4.22	.907	-1.185	1.239	Ítem 47	4.06	1.087	-1.079	.471
Ítem 22	4.17	1.068	-1.363	1.300	Ítem 48	3.98	1.241	-.947	-.237
Ítem 23	4.41	.921	-1.950	4.018	Ítem 49	4.42	.938	-2.019	4.071
Ítem 24	4.26	.862	-1.139	1.247	Ítem 50	4.11	1.132	-1.179	.640
Ítem 25	4.08	1.029	-1.038	.621	Ítem 51	4.20	1.057	-1.488	1.783
Ítem 26	4.17	.938	-1.191	1.335	Ítem 52	4.22	1.076	-1.479	1.573

Nota: M: media; DE: desviación estándar; As: asimetría; κ: curtosis

In Table 2 we observe all goodness of fit indices are adequate: Root Mean Square Error of Approximation is less than .08 (RMSEA = .007), the ratio of chi square over its degrees of freedom is less than 3 ($\chi 2/df = 1.018$). In addition, the comparative fit index (CFI = 1), goodness of fit index (GFI = .987), and the adjusted goodness of fit index (AGFI = .985) are greater than 0.9. Likewise, the saturations of the items in each factor fluctuate between .413 and .870, which indicates the stability of the factorial structure. Only the item 24 was eliminated because it had a saturation less than .3 in all factors. On the other hand, the McDonald´s ω and Cronbachs α coefficients of the four factors are greater than 0.8, which is an indicator of high internal consistency of the test.

Table 2.
Exploratory factor analysis and reliability coefficients

Ítems	F1	F2	F3	F4	.h²	Ítems	F1	F2	F3	F4	.h²
Ítem 1			.870		.661	Ítem 27		.796			.523
Ítem 2			.739		.615	Ítem 28		.663			.516
Ítem 3			.592		.492	Ítem 29				.686	.571
Ítem 4			.612		.481	Ítem 30	.482				374
Ítem 5			.817		.606	Ítem 31				.703	.536
Ítem 6			.551		.459	Ítem 32				.670	.570
Ítem 7			.992		.635	Ítem 33	.666				.500
Ítem 8			.782		.609	Ítem 34	.699				.471
Ítem 9			.798		.666	Ítem 35	.577				.410
Ítem 10			.696		.613	Ítem 36				.585	.555
Ítem 11			.706		.530	Ítem 37				.722	.669
Ítem 12			.812		.653	Ítem 38				.451	.518
Ítem 13			.529		.652	Ítem 39	.422				.422
Ítem 14				.533	.554	Ítem 40	.480				.311
Ítem 15		.821			.507	Ítem 41	.413				.267
Ítem 16		.530			.376	Ítem 42	.742				.570
Ítem 17		.605			.455	Ítem 43	.703				.489
Ítem 18		.549			.577	Ítem 44	.658				.459
Ítem 19		.457			.519	Ítem 45	.781				.514
Ítem 20		.612			.648	Ítem 46	.670				.344
Ítem 21		.532			.517	Ítem 47	.750				.572
Ítem 22		.490			.503	Ítem 48	.497				.492
Ítem 23				.479	.580	Ítem 49	.573				.516
Ítem 24		Eliminado			.435	Ítem 50	.464				.506
Ítem 25		.694			.533	Ítem 51	.640				.441
Ítem 26		.557			.484	Ítem 52	.504				.399

	F1	F2	F3	F4
F1	1			
F2	.651	1		
F3	.682	.599	1	
F4	.528	.655	.455	1
RMSEA	.007			
χ^2/gl	1144.911/1124= 1.018			
CFI	1			
GFI	0.987			
AGFI	0.985			
ω	.905	.896	.932	.867
α	.903	.895	.930	.866

Nota: F1: Factor 1; F2: Factor 2; F3: Factor 3; F4: Factor 4; h^2: Comunalidades; RMSEA: raíz cuadrada de la media del error de aproximación; $\chi 2$/gl: Chi cuadrada/grados de libertad; CFI: índice comparativo de ajuste; GFI: índice de bondad de ajuste; AGFI: índice de bondad de ajuste ajustado; ω: Omega de Mc Donald; α: Alpha de Cronbach

Discussion

As it was explained previously, it is necessary to have an instrument which responds to the Peruvian cultural context and based on the principles of the family systemic approach. Therefore, the Family Integration Inventory has been created (Arias et al., 2013). Although it has had several applications for research purposes (Arias et al., 2014; Arias, & Ceballos, 2016; Castro et al., 2013), it presents certain limitations in its structure, which have merited a new psychometric review.

The Family Integration Inventory is the only test which evaluates family from a systemic approach that has been created in Peru. Even though there are some publications inspired by a family model, they are only informative (Arias, 2012; Sobrino, 1999; Villarreal-Zegarra & Paz-Jesús, 2015, Villarreal-Huertas, & Villarreal-Zegarra, 2016). In addition, empirical studies on family are not based on the systemic family model. Moreover, those studies have not been developed in organizational contexts, despite the fact that systemic approaches have been worked on in labor organizations with various

methods and techniques such as organizational constellations (Principe, 2017).

In this sense, the Family Integration Inventory was applied to 420 people with two or more children, and after performing an exploratory factor analysis, four factors were found with reliability indices that exceed .8; therefore, it can be said the inventory is a valid and reliable instrument. Likewise, only the item 24 was eliminated, which expresses the following statement: "We respect the decisions that our children make". That item suggests decisions of parents are taken in a democratic way, and on the other hand, that parents do not consider it relevant to involve their children in decision making within home, possibly due to the children's age. However, the item may be ambiguous, it could imply the behavior of parents is subjugated to children´s decisions. Therefore, both statistically and theoretically, it is considered relevant to remove the item 24 from the inventory, which reduces the test to 51 items.

A special mention should be made of the four-factor structure that results from the exploratory factor analysis, because that structure better reflects the assessment by family subsystems, as initially, the inventory was designed (Arias et al., 2013). Thus, factor 1 is composed of 18 items that refer to the fraternal subsystem and its relationship with the family. Factor 2 consists of 12 items and refers to the parental subsystem. Factor three comprises 13 items and corresponds to the entire conjugal subsystem, as originally proposed. Factor 4 is composed of 8 items that refer to the parental and family subsystem. In that sense, factor 1 and 4 have many similarities that should be absolved by more powerful techniques such as confirmatory factor analysis.

A difference that we can highlight at the theoretical level between the factor 1 and the factor 4 would be that the former focuses on the relationship between siblings, while the latter emphasizes the formation of values and family satisfaction. An individual subsystem that originally comprised four items has disappeared, which implies family integration is not oriented towards individuals, but towards the family as a group. Meanwhile, Bowen (1998) has indicated the individuation of family members is a fundamental process in the development of personality, our data would be suggesting that in that process the relations of spouses would not oppose the individualization process. In addition, our results suggest the relationship with children should be conducted gradually and always with the accompaniment of parents (Ecuyer, 2015). However, it is an aspect that will require more research, trying to get more representative samples of our region and under probabilistic selection methods.

Finally, reliability indices of the four factors exceed .8 and correlate with each other significantly, with coefficients ranging from .455 to .682. These data suggest the Family Integration Inventory is a valid and reliable instrument, with a four-factor structure that represents the conjugal, parental, fraternal and family subsystems, as proposed from a systemic approach (Minuchin, & Fishman, 1996). Indeed, the difference between the one-dimensional structure of the first version of the test in relation to the present one, may be due to the factor extraction and rotation method, which for the first case was based on the principal component analysis and Varimax rotation (Arias et al., 2013), while the robust unweighted least squares method with Promin rotation was applied with samples of Arequipa workers.

However, more thorough research is needed to determine other psychometric properties of the Family Integration Inventory, such as confirmatory factor analysis, invariance analysis, convergent or discriminant validity. We hope we can continue to collect information on the benefits and limitations of this instrument, in order to contribute to its improvement. We also hope the inventory will be used as a useful tool, in the field of family diagnosis, in clinical, educational and work contexts; more widespread than just the Arequipa region or the national context.

Authors' participation:
a) Conception and design of the work; b) Data acquisition; c) Analysis and interpretation of data; d) Writing of the manuscript; e) Critical review of the manuscript.
W.A. has contributed in a,b,d, e; R.S. in a, d, e; R.R. in c, e; K.C. in b, e.

Referencias

Aguirre, M. (2007). *Determinantes del Crecimiento Económico, Población y Familia: El Caso Guatemala.* Guatemala: Centro de investigación de la Asociación Familia Desarrollo Población FADEP.

Amato, P. (2005). The impact of family formation change on the cognitive, social, and emotional well-being of the next generation. *The Future of Children, 15*(2), 75-96.

Arias, W. L. (2012). Algunas consideraciones sobre la familia y la crianza desde un enfoque sistémico. *Revista de Psicología de Arequipa, 2*(1), 32-46.

Arias, W. L., Castro, R., Dominguez, S., Masías, M., Canales, F., Castilla, S., & Castilla, S. (2013). Construcción de un inventario de integración familiar. *Avances en Psicología, 21*(2), 195-206.

Arias, W. L., & Ceballos, K. D. (2016). Síndrome de burnout, satisfacción laboral e integración familiar en trabajadores de una tienda por departamento de Arequipa. *Illustro, 7*, 43-58.

Arias, W. L., Masías, M. A., Salas, X., Yépez, L., & Justo, O. (2014). Integración familiar y felicidad en la ciudad de Arequipa. *Revista de Psicología de Arequipa, 4(2)*, 204-215.

Arias, W. L., Quispe, A. C., & Ceballos, K. D. (2016). Estructura familiar y nivel de logro de niños y niñas de escuelas públicas de Arequipa. *Perspectiva de Familia, 1*, 35-62.

Bazo-Alvarez, J. C., Bazo-Alvarez, O. A., Aguila, J., Peralta, F., Mormontoy, W., & Bennett, I. M. (2016). Propiedades psicométricas de la Escala de funcionalidad familiar FACES-III: un estudio en adolescentes peruanos. *Revista Peruana de Medicina Experimental y Salud Pública*, *33*(3), 462-470.

Bianchi, L., & Casper, S. (2000). American Families. *Population Reference Bureau, 55*(4), 1-43.

Bowen, M. (1998). *De la familia al individuo*. Barcelona: Editorial Paidos.

Castilla, H., Caycho, T., Shimabukuro, M., & Valdivia, A. (2014). Percepción del funcionamiento familiar: Análisis psicométrico de la escala APGAR-familiar en adolescentes de Lima. *Propósitos y Representaciones, 2*(1), 49-63. doi: 10.20511/pyr2014.v2n1.53

Castro, R., Arias, W. L., Dominguez, S., Masías, F., Salas, W., Canales, F., & Flores, A. (2013). Integración familiar y variables socioeconómicas en Arequipa metropolitana. *Revista de Investigación (Universidad Católica San Pablo), 4*, 35-65.

Castro, R., Riesco, G., & Arela, R. (2016). ¿Familia y bienestar? Explorando la relación entre estructura familiar y satisfacción con la vida personal de las familias. *Boletim da Academia Paulista de Psicología*, *36*(90), 86-104.

Castro, R., Rivera, R., & Seperak, R. (2017). Impacto de la composición familiar en los niveles de pobreza de Perú. *Cultura Hombre Sociedad, 27*(2), 69-88.

Corcuera, P. (2013). *La familia como objeto de investigación científica*. Lima: Universidad de Piura.

Dominguez, S., Aravena, S., Ramírez, F., & Yauri, C. (2013). Propiedades psicométricas de la Escala de Calidad de Interacción Familiar en escolares de Lima. *Revista de Psicología (Universidad César Vallejo), 15*(1), 55-77.

Dominguez, X. (2007). *Antropología de la familia*. Madrid: Estudios y Ensayos.

Ecuyer, K. (2015). *Educar en el asombro*. Barcelona: Plataforma Editorial.

Fagan, P., Kitt, A., & Potrykus, H. (2011). *Marriage and Economic Well-Being: The Economy of the Family Rises or Falls with Marriage*. USA: Marriage and Religion Research Institute.

Ferrando, P. J., & Lorenzo-Seva, U. (2017). *Factor* (Version 10.5.03) [Computer software]. Tarragona: Universitat Roviri i Virgili.

Guerrero, J., & Puerto, Y. I. (2007). Productividad, trabajo y salud: La perspectiva psicosocial. *Revista Colombiana de Psicología, 16*, 203-234.

Hellinger, B. (2005). *Órdenes de amor*. Barcelona: Herder.

Hertfelder, E., Martínez-Aedo, M., & Velarde, L. (2011). *La familia, desafío para una nueva política*. Madrid: Instituto de Política Familiar.

Herrera, S., Salinas, V., & Valenzuela, E. (2011). Familia, pobreza y bienestar en Chile: un análisis empírico de las relaciones entre estructuras familiares y bienestar. *Revista del Instituto de Sociología y el Centro de Políticas Públicas de la Universidad de Chile*, *6*(44), 1-19.

JASP Team (2018). JASP (Version 0.10.0) [Computer software].

Kampowski, S., & Gallazzi, G. (Comps.) (2015). *Familia y desarrollo sostenible*. Arequipa: Universidad Católica San Pablo.

Lorenzo-Seva, U. (1999). Promin: a method for oblique factor rotation. *Multivariate Behavioral Research*, *34*, 347-356.

Martínez-Pérez, M. D., & Osca, A. (2002). Análisis psicométrico del Inventario de Apoyo Familiar para Trabajadores. *Psicothema*, *14*(2), 310-316.

Matalinares, M., Raymundo, O., & Baca, D. (2014). Propiedades psicométricas de la escala de estilos Parentales. *Persona, 17*, 95-121.

Melina, L. (2009). *Por una cultura de la familia*. Valencia: Edicep.

Merino, C., & Arndt, S. (2004). Análisis factorial confirmatorio de la Escala de Estilos de Crianza de Steinberg: validez preliminar de constructo. *Revista de Psicología (Pontificia Universidad Católica del Perú), 22*(2), 187-214.

Merino, C., Díaz, M., & Cohen, B. H. (2003). De los niños a los padres: El inventario de percvepción de conductas parentales. *Persona, 6*, 135-149.

Minuchin, S., & Fishman, H. (1996). *Técnicas de terapia familiar*. México: Paidós.

Montero, I., & León, O. G. (2007). A guide for naming research studies in Psychology. *International Journal of Clinical and Health Psychology, 7*(3), 847-862.

Muñoz, I. (2004). Pobreza, economía y familia en el Perú. *Provincia, 12*, 53-64.

Muthén, B., & Kaplan D. (1985). A comparison of some methodologies for the factor analysis of non-normal Likert variables. *British Journal of Mathematical and Statistical Psychology, 38*, 171-189.

Muthén, B., & Kaplan D. (1992). A comparison of some methodologies for the factor analysis of non-normal Likert variables: A note on the size of the model. *British Journal of Mathematical and Statistical Psychology, 45*, 19-30.

Ochoa, I. (2004). *Enfoques en terapia familiar sistémica*. Barcelona: Herder.

Pliego, F. (2012). *Familias y bienestar en sociedades democráticas. El debate cultural del siglo XXI*. México: Porrúa.

Pliego, F., & Castro, R. (2015). *Tipos de familia y bienestar de niños y adultos. El debate cultural del siglo XXI en 13 países democráticos*. Arequipa: Universidad Católica San Pablo.

Prado, T. R., & Del Águila, M. (2010). Ajuste y satisfacción en parejas que trabajan. *Revista de Investigaciones Psicológicas, 1*(1), 38-52.

Príncipe, J. (2017). *Constelaciones organizacionales. Historias de la consultoría sistémica*. Lima: Empresa Activa.

Pugliese, L. (2009). Como enfrentar los cambios en las estructuras familiares. Experiencias, desafíos en curso, resultados, evaluación. *Comentarios de Seguridad Social*, *22*, 135-140.

Quiroga, M. A., & Sánchez, M. P. (1997). Análisis de la insatisfacción familiar. *Psicothema*, *9*(1), 69-92.

Riesco, R., & Arela, R. (2015). Impacto de la estructura familiar en la satisfacción con

los ingresos en los hogares urbanos en Perú. *Economía*, *38*(76), 51-76.

Ríos, J. A. (2005). *Los ciclos vitales de la familia y la pareja. ¿Crisis u oportunidades?* Madrid: Editorial CCS.

Rojas, E. (2008). *Amor inteligente*. Bogotá: Planeta.

Rubio, C., Osca, A., Recio, P., Urien, B., & Peiró, J. M. (2015). Work-family conflict, self-efficacy, and emotional exhaustion: A test of longitudinal effects. *Journal of Work and Organizational Psychology*, 31, 147-154.

Sigle-Rushton, W., & McLanahan, S. (2002). The Living Arrangements of new Unmarried. *Demography, 39*(3), 415-433.

Sobrino, L. (1999). Terapia estratégica. *Revista Peruana de Psicología*, *4*(7-8), 51-62.

Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5 Ed.). Upper Saddle River, NJ: Pearson Allyn & Bacon.

Timmerman, M. E., & Lorenzo-Seva, U. (2011). Dimensionality Assessment of Ordered Polytomous Items with Parallel Analysis. *Psychological Methods*, *16*, 209-220.

Ullmann, H., Maldonado, C., & Rico, M. (2010). *Evolución de las estructuras familiares en América Latina 1999-2010. Los retos de la pobreza, la vulnerabilidad y el cuidado.* Santiago de Chile: Naciones Unidas.

Villarreal-Zegarra, D., & Paz-Jesus, A. (2015). Terapia familiar sistémica: Una aproximación a la teoría y la práctica clínica. *Interacciones. Revista de Avances en Psicología*, *1*(1), 45-55.

Villarreal-Huertas, D., & Villarreal-Zegarra, D. (2016). *Apuntes en Terapia Sistémica*. Lima: Instituto Peruano de Orientación Psicológica.

Wilcox, B. (2006). *El matrimonio importa. Veintiséis conclusiones de de las ciencias sociales.* Barcelona: Social Trends Institute.

Yaschine, I. (2014). ¿Alcanza la educación para salir de la pobreza? Análisis del proceso de estratificación ocupacional de jóvenes rurales en México. *Revista Mexicana de Ciencias Políticas y Sociales, 60*(23), 377-406.