# Freedom and psychology in the Americas

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#### Abstract

This study empirically demonstrated that indices of the status of psychology in the 35 countries of the Americas (scholarly productivity, existence of a psychological ethics code) are tied positively to enabling national conditions (economic and political freedom) in which the discipline is situated. Specifically, the relationship of economic and political freedom to the research productivity of psychologists was mediated by Internet usage. While political freedom and urban population ratio together predicted the adoption of a formal ethics code, the proportion of urban population was a more powerful predictor. These findings are discussed within the structural and dynamic realities of the region, and promising lines of inquiry are identified.

Keywords: freedom, research productivity, associations, ethics

## Libertad y psicología en las Américas Compendio

Este estudio empíricamente se manifestó que los índices del estado de psicología en los 35 países de las Américas (productividad de estudiante, existencia de un código de ética psicológico) son atados positivamente al permiso de condiciones nacionales (libertad económica y política) en que la disciplina es situada. Expresamente, la relación de la libertad económica y política a la productividad de investigación de psicólogos fue mediada por el uso de Internet. Mientras la libertad política y la proporción demográfica urbana juntos predijeron la adopción de un código de ética formal, la proporción de la población urbana era un profeta más poderoso. Hablan de estas conclusiones dentro de la realidad estructural y dinámica de la región, y las líneas prometedoras de la pregunta son identificadas. *Palabras clave*: libertad, productividad de investigación, asociaciones, ética

It is widely thought that the stability and growth of psychology are rooted in economic and political systems that reflect some type of demand economy and representative government which functions to safeguard individual and collective freedoms (Jing, 2000; Rose, 1999), notwithstanding historical accounts of the discipline having evolved in other seemingly inhospitable economic and political environments (Brock, 2006; Kugelmann & Belzen, 2009). The connection between the status and expansion of psychology and the economic and political systems in which the discipline is situated may be due to the expectations of governments, business and industry, and the public that psychology is an important component in remedying societal ills and advancing personal fulfillment (Jing, 2000; Stevens & Wedding, 2004a, 2004b). Furthermore, inhabitants of free-market democracies tend to have sufficient tangible assets to pursue more intrinsic

post-material goals (Sullivan & Transue, 1999). Given such expectations, the current investigation examined the empirical relationship of economic and political freedom to the research productivity of psychologists and to the existence of psychological associations and ethics codes in the 35 nations comprising the Americas. Relatively little research has been published on the development of psychology as a science and profession in the Western hemisphere as a whole (e.g., Sanchez-Sosa & Riveros, 2007; Sanchez Sosa & Valderrama-Iturbe, 2001; Ward & Hickling, 2004), and certainly not empirical studies of the influence of national economic and political forces on the discipline.

### Method

For each nation of the Americas, the most recent data, available online or from the author, were obtained for: population (World Bank at http://data.worldbank. org/), urban population ratio (World Bank), economic freedom (Heritage Foundation's Economic Freedom Index at http://www.heritage.org/index/, which includes measures of freedom from corruption, labor mobility,

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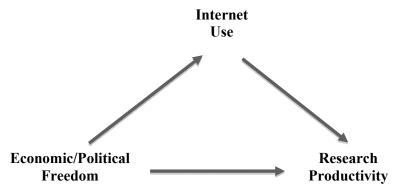
and property rights), political freedom (Economist Intelligence Unit's Democracy Index at http://www. eiu.com/public/, which integrates such measures as government functioning, political participation and culture, and civil liberties), Human Development Index (HDI; a measure of national development - how wealth serves to improve citizens' lives - based on access to education, life expectancy, and standard of living) (UN Development Program at http://hdr.undp. org/en/), Internet users (World Bank), psychologists per population employed mainly in health settings (World Health Organization at http://www.who.int/ en/), the number of authors abstracted by PsycINFO (http://www.apa.org/pubs/databases/psycinfo/index. aspx), the number of authors identified by the Social Science Citation Index (SSCI; http://thomsonreuters. com/products services/science/science products/az/social sciences citation index/), the number of psychology journals included in Latindex (a regional database of scholarly journals from Latin America and the Caribbean at http://www.latindex.unam.mx/), and the existence of a psychological association at the national level as well as a formal code of psychological ethics (identified through databases maintained by the American Psychological Association (APA; http:// www.apa.org), Interamerican Society of Psychology (SIP; http://www.sipsych.org), International Union of Psychological Science (IUPsyS; http://www.iupsys.org).

### **Results**

Economic freedom was positively correlated with PsycINFO publications, r(30) = 0.404, p = .022, and SSCI documents, r(30) = 0.491, p = .004, per population. Political freedom was positively correlated with PsycINFO publications, r(24) = 0.536, p = .005, SSCI documents, r(24) = 0.559, p = .003, and Latindex journals, r(21) = 0.576, p = .004, per population. HDI was positively correlated with PsycINFO publications, r(33)= 0.349, p = .040, and SSCI documents, r(33) = 0.483, p = .003, per population. Internet users per population was positively correlated with PsycINFO publications, r(33) = 0.526, p = .001, and SSCI documents, r(33) = 0.612, p < .001, per population.

Exploratory factor analyses with varimax rotation yielded one factor (EV = 1.827) for economic and political freedom and two factors (EVs = 1.994 and 0.994) for PsycINFO publications, SSCI documents, and Latindex journals per population. Scores for economic and political freedom and for PsycINFO publications and SSCI documents per population (loadings = .997 and .995) were converted to *z* scores and summed to form composite indices of a country's freedom and the research productivity of psychologists, respectively.

It was hypothesized that the relationship of freedom within a country to the research productivity of psychologists would be mediated by level of national development (HDI) and by electronic access to information and colleagues (Internet users per population). If national development and access to information and colleagues are processes through which freedom influences research productivity, then the introduction of either HDI and Internet users per population as a meditational variable should reduce the direct association of freedom to research productivity. The conditions needed to establish mediation were met only for Internet users per population (see Figure 1; Baron & Kenny, 1986): (1) a relationship between freedom and research productivity,  $R^2 = .209$ , F(1, 33) = 8.721, p =.006,  $f^2 = 0.824$ ; (2) a relationship between freedom and Internet users per population,  $R^2 = .286$ , F(1, 33) =13.209, p = .001,  $f^2 = 0.944$ ; (3) a relationship between Internet users per population and research productivity with the effect of freedom on Internet users per population removed,  $R^2 = .367$ , F(2, 32) = 9.282, p < .001,  $f^2 =$ 0.978; and (4) a Sobel test showing a diminished direct relationship between freedom and research productivity with Internet users per population as mediator, z =2.226, p = .026.



*Figure 1.* Mediation by Internet users per population of the relationship between national economic/political freedom and the research productivity of psychologists.

Separate 2 (Psychological Association) x 2 (Ethics Code) ANOVAs on economic freedom and political freedom yielded a main effect for ethics code on political freedom, F(1, 22) = 4.632, p = 0.43,  $\eta_p^2 = .174$ . Countries with a higher index of political freedom are more likely to have a code of ethics. Separate 2 (Psychological Association) x 2 (Ethics Code) ANOVAs on population, urban population ratio, and psychologists per population produced a main effect for ethics code on urban population ratio, F(1, 31) = 4.226, p = .048,  $\eta_p^2 = .120$ . Countries with a higher proportion of their population in urban areas are more likely to have a formal code of ethics. A logistic regression of political freedom and urban population ratio on existence of an ethics code was significant,  $\chi^2(2, N = 26) = 14.96$ , p = .001; Cox & Snell  $R^2 = .437$ . The overall success rate in predicting the existence of a code of ethics from the index of political freedom and proportion of urban population was 84.6%. The regression analysis showed a significant odds ratio for urban population ratio; the relative odds of the existence of an ethics code are greater for countries with a higher urban population ratio, Wald's  $\chi^2 = 4.409$ , p = .036. Simply put, the odds of a country having an ethics code increase by a multiplicative factor of 1.116 for each percentage increase in that country's urban population (95% CI = 1.007-1.236).

# Discussion

Weaknesses of the data aside (e.g., the comprehensiveness of research abstracted by electronic databases), this study establishes an empirical relationship between economic and political freedom and the status of psychology across the 35 countries of the Americas. The association of economic and political freedom to the research productivity of psychologists in the Western hemisphere supports previous research indicating that free-market democracies are favorable to psychology as it is situated in the 71 member countries of the IUPsyS (Stevens, 2010). The history of psychology in Latin America and the Caribbean especially reveals a tumultuous and slow forward movement, respectively, that is closely tied to larger economic and political conditions that either nurture or threaten disciplinary vitality (Sanchez Soza & Valderrama, 2001; Ward & Hickling, 2004).

However, the current study did not reaffirm that HDI (i.e., how national wealth improves general quality of life) mediates the relationship of freedom to the research productivity of psychologists (cf. Stevens, 2010), a finding consistent with evidence that quality of life is a seldom-studied topic by psychologists in the region (Sanchez-Sosa & Riveros, 2007). In the Americas the relationship between freedom and research productiv-

ity appears to be mediated in a more narrow fashion by electronic access to information and communication with colleagues (Internet users per population). This suggests a model of disciplinary development that complements Latin American and Caribbean neostructural policies of "modernity with solidarity" (i.e., free enterprise modulated by civic-state commitment to social justice) (Leiva, 2008, p. 1). Neostructural economic and political transformation may contribute derivatively to scholarly productivity in much of the Americas vis-à-vis investment that improves the digital communications infrastructure and strengthens trust and equality within nascent and established collaborative professional networks. The importance of strengthening digital connectivity lies in post-colonial trends showing that psychology in the Americas, most notably in Latin America, gains momentum via transnational exchanges between psychologists which promote the formation of recognized and unofficial communities of scientists and practitioners (Sanchez Soza & Valderrama, 2001; Ward & Hickling, 2004).

The relationship between economic and political freedom to the status of psychology was only partially confirmed when two previously unexamined criteria for disciplinary well-being were used: the existence of a psychological association at the national level and a formal code of psychological ethics. Only political freedom was linked to the existence of an ethics code. Furthermore, selected population indices revealed that the proportion of urban population was tied to the existence of an ethics code whereas, surprisingly, the density of psychologists was not. When examined together, urban population ratio appeared more potent than political freedom in predicting the existence of a formal ethics code. Perhaps, ethics codes are born more of demographic necessity than from principles concerning human rights. That is, given the level of disciplinary development of psychology in many countries of the Americas that belong to the majority world, the utilitarian value of regulatory standards of conduct may be greater than the moral values embedded in aspirational principles.

Further research is needed to identify the structural elements and dynamic forces in the 35 countries of the Americas that contribute to the regional status of psychology and the pathways through which they exert influence. Of particular interest would be studies that articulate the complex network of intermediary variables between macro-level social conditions and disciplinary development and well-being. Investigations into how transitions in economic and political conditions affect psychology as a science and profession would be a welcomed addition to the scant literature in this area. From a cognitive perspective, Michael Harris Bond's social axioms (i.e., culture-level beliefs and expectations such as dynamic externality and societal cynicism) offer a cognitive framework within which to investigate the facilitating or constraining effects on psychology of the economic and political systems in which the discipline is situated (Bond et al., 2004). Similarly, the work of Ronald Ingelhart and Wayne Baker (2000) on the imprint of culture on the responses of nations to modernization may provide insight into the developmental course of psychology within countries and regions. For now, one fact remains clear: the relationship of psychology to free-markets and representative government is anything but spurious (cf. Brock, 2006).

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