

International socialization at the state and individual levels: mixed evidence from intellectual property

Jean-Frédéric Morin 
Laval University

E. Richard Gold 
McGill University

Abstract *This article synthesizes the results of two quantitative analyses, one at a macro and the second at a micro level, to shed light on the process of international socialization. The first analysis examines the seeming adoption of intellectual property norms at the state level while the second looks at the internalization of similar norms at the individual decision maker level. Both pay special attention to foreign education and capacity-building courses as carriers of US norms to developing countries. By triangulating the results of these analyses, we develop a more nuanced view of international socialization processes than analyses centred at only one level. We provide clear evidence that institutionalization of foreign norms often takes place prior to individual persuasion rather than as a result of it. We show that different socialization types (acculturation and persuasion) and the transmission of different idea types (causal and normative beliefs) may simultaneously operate in opposing directions. These conclusions reveal a bias in previous studies that focussed at only one level of analysis and support calls for greater eclecticism in the levels of analysis.*

While scholars from various theoretical traditions recognize that international socialization is a major source of legal and policy change (Park 2014), the exact pathways through which this occurs requires further explication. Specifically, it raises questions about the role of each of the state and the individual in socialization. At the state level, the literature leaves open the questions of whether a state's adoption of norms necessarily presupposes the conversion of the elite to those norms and how channels of socialization affect the degree of adoption by the state. At the individual level, there remains an open question of whether we can distinguish the internalization of foreign causal beliefs from the internalization of related principled beliefs. Based on a novel empirical analysis, we seek to clarify the answers to these questions.

This article combines the results of two separate quantitative analyses—one at the macro and the second at the micro level—to shed new light on international socialization processes related to intellectual property (IP) rights. The first study examines the adoption of ideas at the *state* level while the second looks at the

internalization of similar ideas at the *individual* level. Both analyses pay special attention to foreign education and capacity-building courses as carriers of ideas related to IP from the US to developing countries. By triangulating the results from these analyses, we gain a significantly more subtle picture of the process of international socialization than the literature has thus far revealed.

One advantage of our approach is that by mixing results from state and individual levels, we can better distinguish between idea types (causal or principled beliefs) and internalization types (acculturation or persuasion). We find evidence that foreign education favours the transmission of different types of ideas. Causal beliefs acquired in the classroom by some specific individuals and principled beliefs seemingly adopted by the state through the cumulative learning of generations of foreign students do not necessarily converge. We also find support for the claim that policymakers exposed to capacity-building courses can act as vehicles for state internalization even if—at the individual level—those policymakers do not believe in the ideas that they transmit. Capacity building, as opposed to foreign education, seems conducive to strategic acculturation but not necessarily genuine persuasion. In sum, socialization appears to be a more complex process than previous studies focussed on only one level have assumed. Binocular vision provides, in this case, a more three-dimensional picture of the phenomenon.

This article is divided into five sections. The first summarizes and extends the current literature on international socialization by bringing together state-centric and individual-centric perspectives on the subject. The second introduces the case of IP and argues that foreign education and capacity building are carriers of US ideas to developing countries. The following two sections present quantitative evidence of the impact of foreign education and capacity building on the adoption or internalization of US ideas concerning IP, first at the state level and then at the individual level. The last section discusses those results and points to subtle pathways through which international socialization seems to operate. In doing so, it highlights the importance of combining studies that look at the state and the individual levels of idea transmission.

1. Socialization and the level-of-analysis question

The literature on international socialization, as with any research programme, is based on a set of relatively consensual assumptions. We non-exhaustively identify five of them. First, most scholars agree that international socialization is a social process that is directed towards the internalization of ideas arising elsewhere in the international system (Schimmelfennig 2000, 112). Second, the literature readily recognizes that these ideas take various forms. Robert Keohane and Judith Goldstein (1993) label these ‘causal beliefs’—ideas that link causes to effects—and ‘principled beliefs’—ideas that distinguish right from wrong and define desired social objectives. Third, scholars generally understand that “internalizing” ideas means following them autonomously without the need for the sustained use of external compulsion (Checkel 2005). Fourth, most scholars acknowledge that international socialization is not necessarily a one-way process from active and knowledgeable socializers to passive and ignorant socializees, as socializees may as well reject as adopt alien ideas and respond by promoting a different set of ideas (Chin 2012; Epstein 2012; Terhalle 2011). Fifth, and despite the above point, it is widely recog-

nized that prevailing ideas held by powerful actors—even if contested—tend to diffuse globally as international socialization processes are deeply embedded in global power structures (Ikenberry and Kupchan 1990; Adler and Bernstein 2005).

Against this consensual backdrop, scholars disagree on several issues regarding international socialization. One of these issues is the level-of-analysis question: Should we consider international socialization to be a macro inter-state or a micro inter-personal phenomenon? That is, are foreign norms adopted by the state without necessarily passing through individuals who internalize those beliefs? We briefly review this debate below by presenting the inter-state theoretical arguments, then the inter-personal theoretical argument, and finally their respective methodological benefits.

The inter-state conceptualization of socialization is prevalent in international relations (IR). As noted by Jeffrey Checkel, 'much of the literature downplays or brackets [micro] dynamics and, instead, offers macro-historical or macro-sociological arguments'. (2003, 210) For example, Frank Schimmelfennig considers that 'international socialization generally refers to the socialization of states', making it clear that 'it does not necessarily require personal internalization at the level of policy-makers' (2000, 112). The possibility that individual policy-makers might adopt foreign ideas without authentically believing in their virtue does not interest Schimmelfennig, as long as those policymakers recognize and comply with those norms. Likewise, David Bearce and Stacy Bondanella argue that 'socialization becomes interesting for IR theory inasmuch as [it is located] at the state level' (2007, 707), suggesting that socialization at the individual level is a matter for other fields of study, perhaps sociology or psychology. These authors justify their state-centric perspectives on the IR disciplinary tradition that considers the 'relevant social actors in international politics [to be] corporate actors' (Schimmelfennig 2000, 112) with states, in particular, being 'the primary actors in the international system' (Bearce and Bondanella 2007, 707).

There are at least three alternative conceptions of inter-state socialization. We briefly examine each. First, a small number of scholars attribute personhood to states. For Alexander Wendt, for example, states are social actors and, as such, *are* persons (2004, 289). States may not be a single organism and may not possess consciousness, but they are intentional and purposive actors, with socially constructed identities built through interactions with other states. Thus, states can socialize others, be socialized, or intentionally disrupt socializing structures, in the same manner as do natural persons.

Most state-centric analysts reject Wendt's scientific realism and rely instead on a second conceptualization of inter-state socialization. They regard a state's personhood as a useful fiction: a state does not really have an anthropomorphic essence, but the world operates *as if* it does. The neorealist Kenneth Waltz subscribes to this form of instrumentalist-empiricism when he argues that states 'imitate each other and become socialized to their system' (1979, 128). While Waltz takes the state as the main unit of analysis and leaves aside domestic and individual activity, he remains aware that those other levels of analysis underlie states' behaviours.

A third group of state-centric scholars picture the state as a collection of people and analyse inter-state relations as a form of inter-group relationship (Alderson 2001). Trine Flockhart (2006), for example, builds on social identity theory to

conceptualize state socialization as a process taking place within elite groups. Under this conceptualization, a foreign idea may make its way into a state culture through the auspices of the elite, without necessarily being internalized by the broader political culture at the mass level, especially if the elite and the mass have different identities and notions of alterity. Under this conception, the mass can even oppose the translation of foreign ideas into actual policy (Hopf 2013). Thus, state socialization—defined here as the internalization of foreign ideas by the elite—is not viewed as a sufficient condition for behavioural change by the state as a whole.

Despite their differences, each of these three conceptualizations sees international socialization as fundamentally occurring at the state level, whether the state is understood to be a single and real person, a useful fiction or a group of elite individuals. An alternative to these state-centric approaches is to locate international socialization at the level of the individual. Following the work of Martha Finnemore and Kathryn Sikkink (1998) on norm diffusion, several analysts have come to recognize that individual activists can become influential idea or norm entrepreneurs—that is, socializers. Building on this understanding, an increasing number of IR scholars consider that idea takers—that is, socializees—are also individual human beings rather than aggregate actors. Following this insight, one can conceptually link socialization at the individual level with behavioural change at the state level in one of two ways.

First, one can hypothesize that some individual decision makers have sufficient authority to make autonomous policy decisions and orient their home state in one direction or another. If those decision makers are socialized to foreign ideas, they have the political capacity to imprint them onto state behaviour. For example, Jeffrey Chwieroth (2007a) ascribes the diffusion of capital account liberalization in developing countries to the socialization of finance ministers and heads of central banks to neoliberal ideas.

Second, one can conceive of the state apparatus as being composed of several individuals, none of whom fully controls the state, even in the case of dictatorial regimes. To varying degrees, individuals within the state apparatus interact with one another and with their foreign counterparts. Under this perspective, international socialization occurs when individuals socialized to a foreign idea themselves socialize their colleagues until a tipping point is reached in which a critical mass of socialized individuals institutionalize the foreign idea into the state structure (Flockhart 2006, 93).

This second perspective of socialization at the individual level is akin to the conceptualization of state socialization as an inter-group dynamic. Thus, the study of socialization at the individual level is not necessarily incompatible with a state-level analysis. If one acknowledges that a state is neither a person nor a machine controlled by a single individual, the view of socialization as an inter-group process appears compatible with the view of socialization as a progressive diffusion of ideas within the state apparatus (Flockhart 2006). Theoretically, a study of inter-group dynamics can rely on the same set of assumptions as does a study of inter-personal relations. This provides an opportunity to bridge two fundamental perspectives. As Kai Alderson notes, ‘clarifying and studying the avenues of normative internalization within states is one of the key tasks for students of state socialization’ (2001, 418).

The residual difference between a state and an individual perspective on international socialization is methodological rather than theoretical. Mixing a state-level and an individual-level analysis can enhance our capacity to track the causal processes from the transmission of foreign ideas to policy changes.

While a macro-level examination of socialization can demonstrate whether a state exposed to foreign ideas subsequently changes its policies, this approach is ill-equipped to trace how this came about—specifically, the causal chain connecting foreign idea to policy change. On the other hand, a micro-level analysis is better placed to study the detailed process of socialization within specific cases. So, for example, the literature on socialization at the individual level has investigated which specific conditions favour international socialization. One of its key findings is that the context under which interpersonal interactions take place is critical to idea transmission. Specifically, transmission is more likely to be successful when the socializee confronts the idea in a novel and uncertain setting, when the socializer is an authoritative member of the “in-group”, when interactions are repeated, sustained and prolonged, and when the interaction between socializer and socializee occurs in small, informal and insulated settings (Checkel 2005; Lewis 2005; Atkinson 2010). Another finding is that the capacity of the socializee to comply with transferred ideas and to change policies is contingent on the domestic structure within the socializee’s state. Since individuals within the state are not simultaneously socialized to the foreign idea, variables such as the number of veto-players, the degree of rivalry among key decision makers and the intensity of “palace wars”—to borrow Dezalay and Garth’s expression (2010)—determine the ease and rate of translation of foreign ideas into actual policy (Beyers 2005; Wang 2003).

The literature on socialization at the individual level also usefully distinguishes between two levels of internalization (Goodman and Jinks 2004; Ikenberry and Kupchan 1990). Under the first, called acculturation (or “type I internalization” by Jeffrey Checkel 2005), the socializee learns to play a role and behaves in accordance with the expectations of the socializer without necessarily believing in the norms underlying those expectations. Under the second, called persuasion (or “type II internalization”), the socializee genuinely accepts the foreign ideas as valid and legitimate. This distinction has significant implications. Acculturation can lead to persuasion with time, but the type of internalization at a given moment matters a great deal in explaining how, when and why an actor changes behaviour. If an individual is merely acculturated to an idea, she may act in accordance with foreign norms simply to reap reputational gains. Her role-playing could eventually be broken by an offer of material gain greater than the reputational loss associated with deviant behaviour. Conversely, persuasion is a deeper level of internalization. It is arguably more stable than is acculturation, but it can trigger complex and unforeseen interactions with the broader cognitive system of the socializee.

Despite the significance of this distinction, most state-level studies of international socialization are unable to empirically distinguish between pathways based on individual acculturation or persuasion. These studies typically document state adoption of foreign ideas based on observations of state behaviour or institutional change. For example, studies on state socialization to democratic norms induced by membership in intergovernmental organizations often rely on regression analyses and use cross-national data as their dependent variables, such as level of democratization (Pevehouse 2002) or the frequency of physical integrity abuse (Greenhill

2010). Although these studies report strong and significant correlations between membership in intergovernmental organizations and democratic behaviour, they cannot establish the causal chain linking those variables. The exclusive state-level focus prevents, in fact, those studies from establishing whether internal reformers have simply enhanced knowledge of the *expectations* of democratic countries or whether reformers have experienced a genuine conversion to democratic principles. This limitation is hardly surprising for a state-centric perspective: states can entertain discourses and implement policies but do not have a consciousness that is necessary to believe in or to be persuaded by a norm.

In contrast, studies of international socialization at the individual level are better able to distinguish between acculturation and persuasion. They can document cognitive variations using such data-collection methods as semi-structured interviews, participatory observation and surveys (Beyers 2005; Checkel 2003). Of course, respondents may respond strategically to the researcher's questions and there is no means to determine whether respondents actually believe what they claim to believe (or even if they know whether they really believe). Nevertheless, one can reasonably infer that persuasion occurs if stated beliefs and observed behaviours change congruently. On the other hand, where socialization efforts change behaviours but leave beliefs intact, one can reasonably surmise that acculturation, and not persuasion, is taking place.

Because of their ability to explore complex interaction leading to socialization, individual-level analyses often reject simplistic causal assumptions and offer a more complex picture of socialization. Liesbet Hodge uses surveys, for example, to show that there is no one causal relationship between the personal views of European officials and the mission of the European Commission: officials do not come to hold particular views simply on the basis of their current position within the Commission. Other factors are at play, including past experience and loyalties, leading Hodge to conclude that there are 'several roads' to international socialization (2005, 861).

Despite their suitability to exploring individual beliefs, the methods used to study socialization at the individual level have difficulty going beyond context-specific claims to more generalizable insights into the mechanisms that link socializers' actions to behavioural change by socializees. The abundance of idiosyncratic detail on behaviour implicit in individual-level analyses makes it difficult to isolate the effects of distant phenomena on the process of socialization. A tree can hide in a forest as much as a forest can hide a tree.

In some cases, individual-level analysis is not only noisy, but impracticable. When socialization is not intentional, formalized or conscious, it is often unobservable. In such circumstances, the researcher can neither directly witness the occurrence of socialization nor question individuals about how they were affected by foreign influences. Aggregating actor belief and behaviour under the umbrella of a "state" offers, on the other hand, a much simpler form of analysis. After all, state-level implementation of policy is more transparent than are individual beliefs. This added transparency makes it relatively easier to establish causal relationships between international interactions and a state's behavioural change.

This short review of the literature enables us to conclude that individual-level and state-level analysis are far from theoretically incompatible. In fact, they offer a different mix of methodological strengths and weaknesses that can be combined to accentuate the positives and to overcome the weaknesses of each. With trian-

gulation, it becomes possible to better understand how individuals are socialized within a state and how their individual socialization affects policy change at the state level. With the insights brought about by triangulation, we are better able to make and defend specific causal claims connecting international interactions and policy change.

2. One case and two channels of socialization

To triangulate macro and micro perspectives on socialization, this article focuses on the case of ideas relating to IP. Despite their apparent technical character, IP laws are heavily guided by causal and principled beliefs surrounding their importance (or lack thereof) in inciting research and creation, investments in these activities and the commercialization of results. Methodological constraints make the modelling of innovation and creativity far more challenging than the modelling of trade or tax policies. Those constraints are so inescapable that they prevent policymakers from relying on rational calculations in identifying the optimal level of IP protection—if such a thing is even possible. Legal IP standards are based on what seems appropriate—that is, on socially constructed ideas (Morin, Gold and Daley 2011).

There are several competing ideas that circulate regarding the appropriate level of IP protection for a given state. Both IP justifications and criticisms can be based on any of economic liberalism, scientific positivism, artistic romanticism or natural law (Drahos 1996). Depending on the social environment, it is alternatively claimed that IP fosters or hinders international trade, that trademarks protect or rob consumers, that copyrights provide incentives for or deter creativity, and that patents guard the natural right of inventors to the fruits of their intellectual effort or, alternatively, impede the natural right of deprived communities to have access to the latest pharmaceutical technologies. This complex and evolving ideational environment is consistent with the view that socialization is multidirectional and multidimensional.

Several scholars of IP politics use the concept of “frame” to describe and locate competing sets of ideas that apply to a particular question (Halbert 2005; Helfer 2004; Kapczynski 2008; Muzaka 2011; Sell and Prakash 2004). A frame is a socially constructed cognitive filter that enables individuals to select and interpret relevant information in order to understand and respond to external events. Research on IP has reached two principal findings, both consistent with the broader literature on frames and framing. First, frames adopted by decision makers are usually rooted in pre-established discourses. The frame that “IP protection = increased trade and investment = economic growth”, for example, attempts to reconcile IP with the established paradigm of liberalism. Second, IP scholars have found that successful frames take advantage of political opportunity structures, such as a crisis or policy failure, to reach-out to decision makers. The frame that “counterfeiting = funding for terrorism = insecurity”, for example, capitalizes on terrorist attacks starting with 9/11.

While scholars of IP politics have well documented competing frames surrounding IP and the communities that hold them, the processes through which those frames are transmitted remain unclear. Mapping out all transnational flows of socialization regarding IP would be daunting, if not impossible. This article

focuses, instead, on a well-explored area of socialization: from the US to developing countries. While we acknowledge the multidirectionality of socialization processes, it is methodologically useful to isolate specific socialization efforts to better triangulate the macro level of state socialization with the micro level of individual socialization. Because of the basic asymmetry of power and interests between the US and developing countries on this issue, the transmission of IP ideas from the US to developing countries (even if incomplete due to feedback loops and resistance) offers an important glimpse into the processes underlying international socialization. The US—often at the behest of prominent multinational corporations—is by far the most active and powerful entrepreneur in promoting the diffusion of its IP standards—that IP promotes economic growth and trade—globally (May and Sell 2006). Since most other developed countries have standards that are deemed roughly equivalent, US socialization efforts target developing countries' elites. To be sure, some IP standards remain controversial even in the US and other developed countries, but the political elite of these countries generally support current standards of IP protection. Given that our goal is to better understand the interplay between the beliefs of elites and state policy, this limited view at socialization taking place between the US and developing countries is sufficient for our task. We leave it to others to build on this work and examine the processes through which socialization from developing to developed countries, or from masses to the elite, may similarly occur.

In conducting this analysis, this article focuses on two of the most widely recognized, straightforward and unidirectional channels of socialization from US to developing countries. The first pathway of socialization we investigate is university education. Foreign students attending US universities provide a channel through which US ideas regarding IP can make their way into developing countries. We discuss later the nature of those ideas. Once those students return home, they integrate into the local elite, bringing with them the ideas that they acquired in the US. Studies of the effects of socialization in other fields have shown that education in US universities is a powerful driver of transnational socialization (Bu 2003; Atkinson 2010; Brand and Rist 2009; Chwierothe 2007a; Scott-Smith 2008).

The second pathway of international socialization is capacity-building training offered by the US administration to developing-country civil servants. Like university education, capacity-building courses are especially well suited to socialization as they offer confidential, insulated and technical settings for idea transmission. In IP, some capacity-building programmes are specifically designed for the unilateral socialization of pupils, in a paternalistic way (May 2004; Matthews 2005; Matthews and Munoz-Tellez 2006). Apart from the US, several governmental agencies and intergovernmental organizations offer capacity-building programmes that are suspected of being biased in favour of norms prevailing in Western countries. The US programme, however, is the only one to clearly and explicitly aim for the diffusion of US ideas about the importance of IP in facilitating economic growth. Indeed, the US government established the Global Intellectual Property Academy in 2006 to, in its own terms, 'present the US methods for protecting the IP rights of business owners' and expose foreign officials 'to a United States model of protecting and enforcing intellectual property rights' (United States Patent and Trademark Office (USPTO) 2013). In 2012, the Academy 'provided training to 9,217 foreign officials from 129 countries on a variety of intellectual property topics' (USPTO 2013).

While university education and capacity-building training might not be the only channels of international socialization on IP ideas, they are particularly apt for the present analysis as they are recognized as important routes to socialization and are direct and tractable. In particular, data can be collected both at the state and at the individual level for education and capacity-building emanating from the US.

In order to isolate the effect of university education in the US and capacity building offered by the US from other known factors that can affect IP idea acquisition, whether held by individuals or as institutionalized by the state, our empirical analysis relies exclusively on quantitative methods. While both quantitative and qualitative methods have an important and complementary role in understanding the transnational flow of ideas (Chwieroth 2007b), our research question is more amenable to a quantitative analysis. Typically, quantitative analyses draw on smaller sets of data across a greater number of units (states or individuals), while qualitative analysis draws on a richer data set but across a small number of units. Given our aim of triangulating state and individual levels, breadth of sample is more important than is depth of data. Quantitative analysis also offers the benefit of more easily and systematically controlling for variables other than university education and capacity-building training. Further, it is desirable to use the same methodological strategy and data types when examining each of the macro and micro levels, given our aim of triangulation.

The next two sections assess the extent to which foreign education and capacity building actually contribute to the internalization of US IP ideas, first at the state level and then at the individual level.

3. Macro-perspective: socialization at the state level

In order to measure the internalization of IP norms at the state level, we developed a new statistical index (Morin and Gold 2014). This index scores countries according to the number of US-style IP rules implemented in their domestic legislation that were not otherwise required by the World Trade Organization's Agreement on Trade Related Aspects of Intellectual Property Rights (see Appendix for a complete list of indicators). The focus on US-style IP rules is important as we are studying the diffusion of US IP norms. Data was collected for each year from 1995 to 2008, and for all developing countries with a population of over 1 million and for which data was available. The result is 121 countries and a sample of 1694 country-years.

The first socialization channel studied—university education—is measured by the number of nationals of a country studying in the US in the previous year, regardless of programme length. Data were obtained from the Open Doors database published by the Institute of International Education. The second socialization variable—capacity building—is indicated by the cumulative number of IP-related training events sponsored by the US government in which the country has participated since January 1995. Data for this variable were collected from the online training database maintained by the US government. We lagged these variables by one year to reflect the time necessary for returning students and trained officials to generate policy change. While we acknowledge that it may take longer for these students to affect policy, we wanted both to capture short-term effects and avoid confounding factors that a longer lag would engender.

Five control variables are included in the model (see Appendix for full variable description and data sources). Each was found by previous studies to favour the adoption of US IP norms in developing countries by channels other than socialization (Braithwaite and Drahos 2000; Sell 2003; Shadlen, Schrank and Kurtz 2005; Shadlen 2005). The first control variable is the given country's gross domestic product per capita, considered an indicator of the relative economic interest of the country in aligning its law to the high standards of the US. The second variable is the country's listing on the Priority Watch List of the US government, since listed countries face the risk of trade sanctions if they do not increase their level of IP protection. The third is whether the country is under review pursuant to the US Generalized System of Preferences, which is another form of threat expression as reviewed countries can be denied trade preferences if they do not offer a level of IP protection deemed adequate and effective. The fourth is the conclusion of a free trade agreement that legally obliges the country to adopt US-style IP norms. The fifth is the highest level of IP protection in a geographical region, since countries within a region compete to attract foreign investment by offering higher levels of IP protection. Other variables, such as the level of private investment in research and development or training carried out by the World Intellectual Property Organization, were not available for the geographic and the temporal coverage of this study.

We selected a fixed-effects model to quantitatively assess and study the relative contributions of each of the variables on the internalization of US-style IP norms. This technique effectively manages certain forms of unobserved heterogeneity and eliminates bias arising from omitted variables, provided that the omitted variables remain effectively fixed within each country. The model was estimated using robust standard errors to adjust for heteroscedasticity in the distribution of the error term.

As indicated by Table 1, both the fraction of the population holding a degree from an American university (population studying in the US) and the number of capacity-building events (IP capacity-building training) are significantly and positively associated with an internalization of a US-style IP norm in the domestic legal system, even when key control variables are taken into account. These findings are strong evidence that some form of socialization has taken place. While already acculturated individuals may have organized capacity training or encouraged oth-

Table 1. The influence of university education and capacity building on states' internalization of US-style intellectual property (IP) norms (fixed effects).

Variables	Coefficients (1443 observations)	
Population studying in US	0.444	***
IP capacity building training	0.012	***
Gross domestic product per capita	0.000	***
Priority watch list designation	0.313	
General system of preferences review	-0.393	
US bilateral trade agreement	1.948	***
Regional top score	0.221	***

*** *significant* at ≤ 0.001 .

ers to study in the US, the trigger for state adoption of US norms was the exposure of others within the domestic system to US norms. Nevertheless, none of this necessarily implies that foreign students and trained officials were actually persuaded of US IP ideas' appropriateness. This can only be established by an analysis of socialization at the individual level.

4. Micro-perspective: socialization at the individual level

To analyse socialization at the micro-level of individuals, we conducted a survey of IP experts (Morin 2014). Compared with other data-collection techniques used to document what individuals actually believe, the private and confidential nature of a survey offers the benefit of discouraging public posturing, especially for respondents engaged in a policy enterprise, and encouraging candid expressions of personal views, especially from respondents who cannot speak in the name of their organization.

This survey was open to all professionals—including attorneys, scholars, policymakers and lobbyists—devoting at least ten per cent of their working time to IP-related matters. The survey was available exclusively on the Internet, in English, French, Spanish and Portuguese. Email invitations to fill out the survey were sent to 10,135 potential respondents whose names and email addresses were collected from major conference organizers, professional associations, intergovernmental organizations and specialized news providers. A total of 1,679 qualified persons completed the survey to the end, from 1 to 31 March 2012. Of those, 483 were born in a developing country and 288 work for a governmental organization.

If the sample were representative of the overall population of IP experts, 1679 respondents with a response distribution of 50 per cent and a confidence level of 95 per cent would give a margin of error of 2.39 per cent. There is, however, some uncertainty concerning the representativeness of the sample. As described above, respondents were not selected randomly since the characteristics and the boundaries of the targeted population are unknown. That said, sufficient information was obtained on several key demographic variables to statistically control for this (see Appendix for variable definitions and descriptive statistics).

More specifically, nine questions within the survey were used to assess respondents' internalization of IP ideas promoted by the US government. Agreeing (slightly, moderately or strongly) with assertions in the left-hand column of Table 2 is considered to denote a lower internalization of US IP ideas, while agreeing (slightly, moderately or strongly) with assertions in the right-hand column suggests a higher internalization of US ideas. From those nine questions with six values each, an unweighted index of individuals' internalization of US ideas was created, ranging from 0 to 45. The higher the score, the more the individual respondent is deemed to have internalized US ideas.

Several questions in the survey probed respondents' exposure to the two socialization channels identified. Regarding university education, respondents were asked where they had obtained their highest university degree, in which discipline, and how many years they had spent as full-time university

Table 2. Indicators of individuals' internalization of US-style intellectual property (IP) ideas.

Indicators of non-internalization	Indicators of internalization
1. IP treaties should better take into account other policy areas, including health, education, environment and agriculture.	1. The right to have an IP over one's invention/creation should be considered as an international human right.
2. IP treaties should provide relaxed standards for developing countries.	2. Piracy and counterfeiting should be considered as crimes akin to stealing tangible goods.
3. The public domain is a commons that needs to be protected.	3. IPRs are effective incentives for investment in research and development.
4. The free sharing of knowledge fosters innovation and creativity.	4. IP enforcement should be considered a security issue as piracy and counterfeiting can fund organized crime and terrorist groups.
5. Cultural and philosophical assumptions of IPRs are typical of western cultures.	

students.¹ Respondents were also asked if they had participated in any capacity-training activity on IP issues in the previous five years, and to identify the type of organizations that had provided the training.²

In addition to the questions on respondents' exposure to foreign education and their participation in capacity-building training, respondents were asked about factors—independent of known socialization channels—that may have had an impact on their internalization of US ideas surrounding IP. Among other things, respondents were asked about their specific field of expertise, their degree of specialization and the number of years of experience they possessed. As these variables are correlated with the index of individuals' internalization, we needed to control for them when assessing the contribution of socialization channels to the individual internalization of US IP ideas.

Table 3 presents the relationship of the above variables with the individuals' internalization of US IP norms. Regressions were performed with StataSE12 linear regression function and robust standard error. The constant refers to the expected value of the index of individuals' internalization if all other variables had a null value.³

The first multivariate model of Table 3 shows that university education has several different and intertwined effects on the internalization of IP ideas. In the overall sample, holding a degree in law or economics tends to increase the likelihood of holding ideas similar to those promoted by the US government. Yet what seems to matter more than the discipline of the degree is the country in which the respondent obtained her degree. This holds true not only for the full sample, but,

¹ To protect the anonymity of respondents, we did not ask in which specific country they were born and educated, but whether it was in a low-income, middle-income or high-income country.

² Respondents were neither asked to name the specific country of education nor the specific provider of training activities. This limitation was necessary to protect respondents' anonymity. In several cases, having specific answers to a number of questions would make the identification of the respondent possible.

³ For the multi-categorical variables of area of expertise and professional sector, "patent" and "national government" were the values selected for the constant.

Table 3. Effects of socialization and other variables on the individual internalization index.

	Entire survey (n = 1414)	Residents of developing coun- tries (n = 415)	Government officials (n = 155)
Education in a developed country	-2.186***(0.664)	-2.932***(0.761)	-4.855**(1.915)
Birth in a developed country	2.319***(0.596)	3.284**(1.632)	5.520***(1.915)
Law degree	1.722***(0.513)	0.858(0.882)	1.460(1.568)
Economics degree	1.828**(0.730)	0.735(1.151)	-1.554(1.575)
Years of education	-0.481**(0.220)	-0.156(0.397)	0.239(0.668)
Years of experience	0.625***(0.230)	0.078(0.307)	0.157(0.780)
Works on policymaking	1.192***(0.459)	0.738(0.657)	2.514*(1.288)
Percentage of working time on IP	1.388***(0.530)	-0.589(0.732)	-0.510(1.797)
Expertise			
Patent	Reference category	Reference category	Reference category
Copyright	-0.530(0.652)	-2.448**(1.228)	1.746(2.307)
Trademark	0.557(0.515)	1.640***(0.823)	-0.670(1.572)
Other	0.361(0.777)	-1.357(1.167)	2.263(1.770)
Government	Reference category	-2.250*(1.303)	
Academic	-5.418***(0.758)	-0.261(1.589)	
Intergovernmental organization	-3.117***(1.023)	-2.747**(1.184)	
business	0.685(0.781)	-8.388***(1.813)	
Non-governmental organization	-9.577***(1.194)	-2.250(1.303)	
attorney	0.244(0.633)	-0.988(0.884)	
Other	-0.703(2.176)	1.505(1.463)	
foreign government			0.836(1.257)
Intergovernmental org			-2.735**(1.278)
Academic centre			1.849(1.271)
Business organization			0.146(1.177)
Non-governmental organization			-1.297(1.521)
Constant	20.036***(1.464)	25.292***(2.098)	20.605***(4.592)

Notes: Standard errors in parentheses.

*significant at 0.1.

**significant at 0.05.

***significant at 0.01.

as indicated in the second model of Table 3, also for residents of developing countries. Whether looking at the entire sample or only those residing in developing countries, the survey shows that the country in which respondents received their highest academic degree has roughly the same effect on their internalization of US ideas as does their country of birth. The relationship, however, is in the opposite direction from that which may have been expected. Education in a developed country tends to *decrease* rather than increase support for the ideas promoted by the US government. IP professionals born in a developing country but educated in a developed country are less likely than their fellow nationals to have internalized US IP ideas. Moreover, the number of years spent in a developed country's university accentuates the effect. The longer respondents from developing countries stay in a developed country university, the more likely they are to hold ideas different from those promoted by the US government.

The third model of Table 3 is limited to government officials. It suggests that the effect of university education in a developed country may be even stronger among governmental officials than among the entire sample surveyed. It does not indicate, however, that training offered by a foreign government has an effect on the level of internalization of US ideas. The only trainings that seem to have an impact on the ideas held by government officials, once one controls for all relevant variables, are those provided by intergovernmental organizations. The more government officials received training from those organizations, the more likely they were to oppose ideas promoted by the US. Considering that the US government often partners with intergovernmental organizations to offer capacity building to developing countries officials, these results are counter-intuitive.

5. Making sense of mixed evidence

The analysis of the triangulated data from macro and micro perspectives points to a richer account of international socialization than does either perspective separately. Looked at individually, the macro and micro perspectives suggest seemingly contradictory causal pathways towards socialization. Under the macro account, foreign ideas flow naturally and positively from education and capacity building through individual policymakers to the state. Under the micro account, individuals are negatively influenced by those same foreign ideas through the same channels. Rather than conclude that the contradiction suggests the intractability of the phenomenon of international socialization, it ought to lead us to revisit our assumptions and propose a more subtle understanding of the situation. As noted by Patton, it is the inconsistencies in findings that illuminate understanding: 'Finding such inconsistencies ought not be viewed as weakening the credibility of results, but rather as offering opportunities for deeper insight into the relationship between inquiry approach and the phenomenon under study' (Patton 2002, 248).

The first step to developing a more subtle understanding of international socialization is to rule out certain causal pathways. The results clearly undermine a bottom-up model of socialization according to which it only takes place if individuals personally believe and incorporate foreign ideas. According to the bottom-up model, some individuals exposed to foreign influence must first be persuaded of those ideas and then must convince their peers within the state apparatus to do the same. Once a critical mass is converted, they jointly take the necessary steps to formally institutionalize that norm in the state. While individuals persuaded

of a norm's appropriateness can certainly favour its institutionalization, the triangulated results suggest that individual persuasion does not necessarily—or even usually—precede state socialization. The institutionalization of foreign norms even seems to take place in the absence of widespread individual persuasion (Schimmelfennig 2000, 112).

With this conclusion in mind, we can consider inverting the temporal sequence between individual persuasion and state institutionalization (Alderson 2001, 420; Ikenberry and Kupchan 1990, 291). That is, it may be the very fact of the institutionalization of a norm in the state apparatus that drives individual persuasion at a later stage. There are at least three explanations as to why a norm could become more persuasive after its institutionalization in the state. First, institutionalization can increase opportunities for additional socialization. New bureaucratic units devoted to the adopted norm are created, already-socialized employees are recruited and new items regarding this norm enter the political agenda. Second, from a discursive perspective, once norms become institutionalized into law, they acquire a self-justificatory property and become powerful rhetorical weapons. Law, including IP law, has the general characteristic of appearing intrinsically legitimate (Kapczynski 2008, 804). Third, institutionalization may generate an uncomfortable cognitive dissonance when the political elite is not persuaded of the appropriateness of the norm. To solve this cognitive dissonance, members of the elite may proceed to change their beliefs in order to fit their actual behaviour, rather than the other way around, a psychological trick that is believed by cognitive psychologists to be common (Festinger 1957). Of course, these three explanations are not mutually exclusive and can operate simultaneously.

These processes from institutionalization to persuasion may explain some of the results presented in Table 3. In the survey, professionals working on policymaking expressed, on average, greater support for strong IP ideas than did professionals working outside of the policymaking process, including government officials responsible for IP examination and litigation. Moreover, seasoned IP professionals expressed stronger support for those ideas than did their junior colleagues. Perhaps unsurprisingly, individuals tend to align their ideas with those of their organization, and this alignment becomes more pronounced over their careers.

Yet results presented in Table 3 also suggest that socialization occurring at university can have long-standing effects during a professional's career. IP professionals educated in a developed country are significantly less likely to subscribe to the ideas promoted by the US government. They were, perhaps, more exposed to critical thinking in western universities concerning those ideas and, presumably, became better able to demystify the idea that increased IP protection favours innovation, social justice and economic growth. This effect is even more pronounced among developing-country respondents to the survey.

The finding on education at a micro level is not incompatible with the finding, at a macro level, that the number of nationals studying in the US is positively related to the level of IP protection. Individuals surveyed for the micro analysis were all IP professionals, while aggregate data for the macro analysis included all university students, irrespective of their future careers. Students who will become IP professionals are likely to have taken IP-related classes and to have been exposed to critiques of causal beliefs linking IP protection to desirable social and economic effects. Importantly, these causal beliefs communicated by university IP professors are quite different from those communicated by the US government. Results

from the survey presented in Table 3 reveal that academics working directly on IP issues are, on average, opposed to stronger IP protection. Foreign students who will not become IP professionals and did not attend IP classes (and thus were not taught by developed-country IP academics) are less likely to have confronted more nuanced and critical views of IP. During their stay in the US, they were, rather, exposed to more general principled beliefs underpinning the IP system such as individualism, rationalism, liberalism and modernism. Those principled beliefs are omnipresent in American society and students fully immersed in US culture cannot escape them unless directly confronted. Therefore, by distinguishing idea types, especially causal beliefs acquired in the classroom and principled beliefs acquired in society, results from the micro and macro analyses can easily be reconciled. International students in general become more supportive of US IP ideas and push their home countries in this direction while future IP professionals become more sceptical of the benefits of transplanting US IP norms into their home countries.⁴

Likewise, the apparent discordance regarding capacity building can be understood if one distinguishes between acculturation and persuasion as two different types of internalization. Results from the state-level analysis suggest that government officials receiving capacity-building training are, at least, more likely acculturated to US expectations. If they decide to comply with those expectations to extract material or reputational gain from the US, they have learnt which norms to institutionalize. Results from the individual analysis suggest, however, that capacity building does not significantly increase the persuasion of recipients on the value and legitimacy of those norms. Thus, it would seem that government officials become adept at identifying and following the rules in return for rewards, rather than persuaded of the correctness of those rules.

An analysis focusing solely at the state level would have likely concluded that socialization succeeded, while an analysis focusing solely at the individual level would have concluded that socialization failed. By triangulating both results, we can infer that foreign education has different effects according to idea type, and that capacity-building programmes have different effects according to internalization types.

This study points to the opportunities for further study. More research is needed, for example, on socialization from less-powerful to more-powerful countries to determine whether the same dynamic of idea transmission with individual persuasion similarly operates. We would posit that this would not be the case since the reputational and material gains for a developed country official from doing so are not obvious. Thus, we would hypothesize that any counter-norm transfer operates through persuasion. This dichotomy of pathway—if demonstrated—would suggest that socialization operates more readily from a more-powerful to a less-powerful country. Our conclusions also suggest that there may be an opportunity for counter-norm entrepreneurship to intervene between the period in which officials are acculturated to US IP norms and when they come to be persuaded by them. How such a counter-norm entrepreneur can effectively exploit this opportunity is similarly a question for future research.

⁴ This is the logical inference that can be drawn from our findings. This conclusion could be further confirmed by conducting a survey of non-experts.

Disclosure statement

No potential conflict of interest was reported by the authors.

ORCID

Jean-Frédéric Morin  <http://orcid.org/0000-0003-1053-5597>

E. Richard Gold  <http://orcid.org/0000-0002-3789-9238>

Notes on contributors

Jean-Frédéric Morin holds the Canada Research Chair in International Political Economy at Laval University's Political Science Department.

E Richard Gold is a James McGill Professor at McGill University's Faculty of Law.

References

- Adler, Emanuel and Steven Bernstein (2005) 'Knowledge in power: the epistemic construction of global governance' in Michel Barnett and Raymond Duvall (eds) *Power in global governance* (Cambridge, United Kingdom: Cambridge University Press), 294–318
- Alderson, Kai (2001) 'Making Sense of State Socialization', *Review of International Studies*, 27:3, 415–433
- Atkinson, Carol (2010) 'Does soft power matter? A comparative analysis of student exchange programs 1980–2006', *Foreign Policy Analysis*, 6:1, 1–22
- Bearce, David and Stacy Bondanella (2007) 'Intergovernmental organizations', *Socialization and Member-State Interest Convergence*, *International Organization*, 61:4, 703–733
- Beyers, Jan (2005) 'Multiple embeddedness and socialization in Europe: the case of council officials', *International Organization*, 59:4, 899–936
- Braithwaite, John and Peter Drahos (2000) *Global business regulation* (Cambridge, United Kingdom: Cambridge University Press)
- Brand, Ronald and Wes Rist (2009) *The export of legal education: its promise and impact in transition countries* (Farnham, United Kingdom: Ashgate)
- Bu, Liping (2003) *Making the world like Us: education, cultural expansion, and the American century* (Westport, United States: Praeger)
- Checkel, Jeffrey (2003) 'Going native in Europe? Theorizing social interaction in European institutions', *Comparative Political Studies*, 36:1–2, 209–231
- Checkel, Jeffrey (2005) 'international institutions and socialization in Europe: introduction and framework', *International Organization*, 59:4, 801–826
- Chin, Gregory (2012) 'Two-way socialization: China, the world bank and hegemonic weakening', *Brown Journal of World Affairs*, 19:1, 211–230
- Chwieroth, Jeffrey (2007a) 'Neoliberal economists and capital account liberalization in emerging markets', *International Organization*, 61:2, 443–463
- Chwieroth, Jeffrey (2007b) 'Testing and measuring the role of ideas: the case of neoliberalism in the international monetary fund', *International Studies Quarterly*, 51:1, 5–30
- Dezalay, Yves and Bryant Garth (2010) *The internationalization of palace wars: lawyers, economists, and the contest to transform latin American states* (Chicago, United States: University of Chicago Press)
- Drahos, Peter (1996) *A philosophy of intellectual property* (Aldershot, Dartmouth): United Kingdom)
- Epstein, Charlotte (2012) 'Stop telling us how to behave: socialization or infantilization?', *International Studies Perspectives*, 13:2, 135–145

- Festinger, Leon (1957) *A theory of cognitive dissonance* (Stanford, United States: Stanford University Press)
- Finnemore, Martha and Kathryn Sikkink (1998) 'International norm dynamics and political change', *International Organization*, 52:4, 887–917
- Flockhart, Trine (2006) 'Complex socialization: a framework for the study of state socialization' *European Journal of International Relations*, 12:1, 89–118
- Goodman, Ryan and Derek Jinks (2004) 'How to influence states: socialization and international human rights law', *Duke Law Journal*, 54:3, 621–701
- Greenhill, Brian (2010) 'The company you keep: international socialization and the diffusion of human rights norms', *International Studies Quarterly*, 54:1, 127–145
- Halbert, Debora J (2005) *Resisting intellectual property* (London, United Kingdom: Routledge)
- Helfer, Laurence (2004) 'Regime shifting: the TRIPs agreement and new dynamics of international intellectual property lawmaking', *Yale Journal of International Law*, 29:1, 1–83
- Hopf, Ted (2013) 'Common-sense constructivism and hegemony in world politics', *International Organization*, 67:02, 317–354
- Ikenberry, G. John and Charles Kupchan (1990) 'Socialization and hegemonic power', *International Organization*, 44:03, 283–315
- Kapczynski, Amy (2008) 'The access to knowledge mobilization and the new politics of intellectual property', *The Yale Law Journal*, 117:5, 804–885
- Keohane, Robert O and Judith Goldstein (1993) *Ideas in foreign policy* (Ithaca, United States: Cornell University Press)
- Lewis, Jeffrey (2005) 'The Janus face of Brussels: socialization and everyday decision making in the European union', *International Organization*, 59:4, 937–971
- Matthews, Duncan (2005) 'TRIPs flexibilities and access to medicines in developing countries: the problem with technical assistance and free trade agreement', *European Intellectual Property Review*, 11: 420–427
- Matthews, Duncan and V Munoz-Tellez (2006) 'Bilateral technical assistance and TRIPs: the United States, Japan, and the European communities in comparative perspective', *Journal of World Intellectual Property*, 9:6, 629–653
- May, Christopher (2004) 'Capacity building and the (re)production of intellectual property rights', *Third World Quarterly*, 25:5, 821–837
- May, Christopher and Susan K Sell (2006) *Intellectual property rights: a critical history* (Boulder, United States: Lynne Rienner)
- Morin, Jean-Frédéric (2014) 'Paradigm shift in the global IP regime: the agency of academics', *Review of International Political Economy*, 21:2, 275–309
- Morin, Jean-Frédéric and Edward Richard Gold (2014) 'An integrated model of legal transplantation: the diffusion of intellectual property law in developing countries', *International Studies Quarterly*, 58:4, 781–792
- Morin, Jean-Frédéric, Kevin Daley and E. Richard Gold (2011) 'Having faith in IP: empirical evidence of IP conversion', *WIPO Journal*, 3:2, 93–102
- Muzaka, Valbona (2011) 'Linkages, contests and overlaps in the global intellectual property rights regime', *European Journal of International Relations*, 17:4, 755–776
- Park, Susan (2014) 'Socialisation and the liberal order', *International Politics*, 51:3, 334–349
- Patton, Michael Quinn (2002) *Qualitative research and evaluation methods* (Thousand Oaks, United States: Sage)
- Pevehouse, Jon (2002) 'Democracy from the outside-in? international organizations and democratization', *International Organization*, 56:3, 515–549
- Schimmelfennig, Frank (2000) 'International socialization in the new Europe: rational action in an institutional environment', *European Journal of International Relations*, 6:1, 109–139
- Scott-Smith, Giles (2008) 'Mapping the undefinable: some thoughts on the relevance of exchange programs within international relations theory', *The ANNALS of the American Academy of Political and Social Science*, 616:1, 173–195
- Sell, Susan K and Aseem Prakash (2004) 'Using ideas strategically: the contest between business and NGO networks in intellectual property rights', *International Studies Quarterly*, 48:1, 143–175
- Sell, Susan K (2003) *Private power, public law: the globalization of intellectual property rights* (Cambridge, United Kingdom: Cambridge University Press)

- Shadlen, Kenneth C (2005) 'Exchanging development for market access? deep integration and industrial policy under multilateral and regional-bilateral trade agreements', *Review of International Political Economy*, 12:5, 750–775
- Shadlen, Kenneth C, Andrew Schrank and Marcus Kurtz (2005) 'The political economy of intellectual property protection: the case of software', *International Studies Quarterly*, 49:1, 45–71
- Terhalle, Maximilian (2011) 'Reciprocal socialization: rising powers and the west', *International Studies Perspectives*, 12:4, 341–361
- United States Patent and Trademark Office, 'Training and education', <www.uspto.gov/ip/training/>, accessed 16 May 2013
- Wang, Qingxin Ken (2003) 'Hegemony and Socialisation of the mass public: the case of postwar Japans cooperation with the United States on China policy', *Review of International Studies*, 29:1, 99–119
- Wendt, Alexander (2004) 'The state as person in international theory', *Review of International Studies*, 30:2, 289–316

Appendix

Variable definitions and data sources for Table 1.

Variable	Definition	Source
Index	The index comprises nine equally-weight indicators: (1) Patentability of plants: If no, 0; if neither specifically permitted nor prohibited, 0.5; if yes, 1. (2) Copyright term of 70 years or more after death: If no, 0; if yes, 1. (3) Prohibition of the dissemination of technology used to circumvent measures that control access to copyrighted works: If no, 0; if prohibition is on commercial dissemination only, 0.5; if prohibition covers non-commercial dissemination as well, 1. (4) Ratification of UPOV91: If no, 0; if yes, 1. (5) Ratification of WIPO internet copyright treaty: If no, 0; if yes, 1. (6) Ratification of the Brussels Convention on satellite signal: If no, 0; if yes, 1. (7) Requirements for the protection of pharmaceutical data for at least five years: If no, 0; if yes, 1. Note that protection 'against unfair commercial use' and 'against disclosure by a third party' without a specific time limit of five years or more were not considered sufficient. (8) National or regional exhaustion of patent rights (as opposed to international exhaustion): If no, 0; if yes, 1. (9) Compulsory licenses may be granted: If only for anti-competitive practices or national emergencies, 1; if only for anti-competitive practices, national emergencies, failure to work, insufficient working, or use for use of a dependent patent, 0.5; if for any reasons beyond those already listed, 0.	WIPO and national government websites.
Population studying in US	Each country-year receives a score equal to the number of student's from that country who were studying in the US the year prior, regardless of length of programme. The natural logarithm of this variable was used to account for a non-linear relationship between the variable and the index.	Institute for International Education

(Continued)

Variable	Definition	Source
IP capacity-building trainings	The total number of IP training events that the country has participated in since January 1995. The motivation for rendering the variable as a stock was to reflect the long-term nature of this investment.	Intellectual Property Rights Training Program Database
GDP per capita	Gross domestic product (GDP) measured in current US dollars, divided by population. The natural logarithm of this variable was used to account for a non-linear relationship between the variable and the index.	World Bank
Priority Watch List-designation	Any country-year receives a 1 if the country was designated in the prior year's Special 301 Report as being (a) on the Priority WatchList, (b) a Priority Foreign Country or (c) subject to section 306 monitoring. All other country-years receive a 0.	USTR
General System of Preferences (GSP) review	Any country-year receives a 1 if the country was under GSP review for IP criteria at any point in the year prior. All other country-years receive a 0.	US International Trade Commission
US Bilateral Trade Agreement	Any country-year in which a free trade agreement with the US was in force in the country receives a 1. All other country-years receive a 0.	USTR
regional top score	Each country-year receives the highest score that any other country in its region had that year. Countries were first divided up into six regions, these being (1) the Middle East and North Africa; (2) Latin America and the Caribbean; (3) Eastern Europe; (4) Sub-Saharan Africa; (5) East and South Asia; (6) and Central Asia.	

Variable definitions, coding and descriptive statistics for Table 3.

Variable	Definition	Coding	Statistics
Individual internalization index	Index made of nine indicators assessing the relative support for strong intellectual property protection.	From 0 to 45	Mean = 21,96; Median = 23
Education in a developed country	Highest academic degree obtained in a developed country, defined as a high-income country according to the World Bank taxonomy.	0-No; 1-Yes	No = 386; Yes = 1260
Birth in a developed country	Born in a developed country, defined as a high-income country according to the World Bank taxonomy.	0-No; 1-Yes	No = 597; Yes = 1050
Law degree	Hold a law degree.	0-No; 1-Yes	No = 1448; Yes = 847
Economics degree	Hold a degree in economics or management.	0-No; 1-Yes	No = 2073; Yes = 222

(Continued)

Variable	Definition	Coding	Statistics
Years of education	Number of years as a full-time university student.	0- zero 1- ≤ 3 years 2- 2–5 years 3- 6–7 years 8 years	Mean=3.91 Median = 4
Years of experience	Number of years professionally active in IP issues.	0- <2 years 1- 2–4 years 2- 5–9 years 3- 10–20 year 20 years	Mean = 3.86; Median = 4