

Medicalizing Mental Health: A Comparative View of the Public, Private, and Professional Construction of Mental Illness.

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NSF Proposal submitted February 2005

PROJECT SUMMARY

Across the globe, the study of mental health is increasingly a part of the medical domain. This relatively recent phenomena is the subject of my dissertation: **Medicalizing Mental Health: A Comparative View of the Public, Private, and Professional Construction of Mental Illness.** This dissertation will answer questions related to how and why mental health has been medicalized. Of central importance to this study is its use of a global perspective, specifically how the pressures of globalization and national context interact to create more or less unique mental health realities within and across societies. Scholars have recognized that societies increasingly rely on the medical profession to provide solutions to a wide array of problems. This dissertation will further extend and test such hypotheses in the critical area of mental health. For example, one line of thought suggests that the incorporation of mental health problems into the medical profession may further institutionalize the control of social behavior. While sociologists have theorized about this process, terming it medicalization, such theories are embedded within American culture, making it unclear to what extent they can be applied cross-nationally. More specifically, this American-centered perspective fails to take into account countervailing powers that interact with the medical profession, such as the state and insurers. To address this, my dissertation brings together macro-theories of globalization and the welfare state to understand medicalization in a global perspective.

To answer these questions, this project:

1. Reconceptualizes the notion of medicalization in a comparative perspective.
2. Collects new data from multiple sources, such as the World Health Organization (WHO), Organisation for Economic Co-operation Development (OECD), and in-depth interviews.
3. Develops a research design that allows for both hypothesis testing and hypothesis generating of how and why mental health has been medicalized.
4. Uses multivariate analysis to test the effects of globalization and the welfare state on different outcomes capturing medicalization.
5. Uses in-depth interviews to gain understanding of processes of medicalization at the national level, to generate new hypotheses to comprehend the interaction of globalization and the welfare state among national players.

Intellectual Merit: The scientific value of this study lies in its theoretical orientation, the comparative angle utilized, and the effort to bring together various literatures that can inform one another and move sociological knowledge further. The new knowledge addresses how macro-theories of globalization and the welfare state and theories within medical sociology can inform one another to increase our understanding of how social organization and structures affect individual lives. Specifically, by reconceptualizing the notion of medicalization in a comparative perspective, this research provides a new direction for theories of medicalization. Furthermore, it advances the welfare state literature by considering the implications of including one of the largest, yet one of the least theorized, welfare spending categories, for the most widely used welfare state categorization. Finally, it advances our understanding of globalization

processes by providing a link between macro-level processes and the national actors embedded in these processes.

Broader Impact: This research produces scientific evidence on the socially-important and policy-relevant questions of the causes and consequences of medicalization. Specifically, it will provide more accurate understanding of the experiences of individuals facing mental health problems across different societies. The core focus on the interplay between the state and professions can better inform intervention strategies at the individual and country level in understanding and responding to mental health problems.

INTRODUCTION

PROJECT DESCRIPTION

I am resubmitting a proposal for my dissertation, *Medicalizing Mental Health: A Comparative View of the Public, Private, and Professional Construction of Mental Illness*. Although the proposal was not recommended for funding, the panel “judged it to be one of ten good candidates for revision and resubmission.” A detailed memo explaining how I have responded to the reviewers can be found in Appendix 1. This dissertation examines the process of medicalization at a global level. Specifically, the societal tendency to rely increasingly on the medical profession to provide solutions to a wide array of problems (Conrad and Schneider 1992). This dissertation addresses a broad question: What are the effects of globalization and the welfare state on medicalization of social behavior, defined as mental health problems, within and across societies. Theories about medicalization are U.S. based and have not been tested in other societies. This is problematic given the possible impact of institutional arrangements across societies, specifically concerning the appropriate relationship among the state, the market, and the medical profession regarding the provision of health care. I reconceptualize medicalization, to include countervailing powers, most importantly the state.

This research advances the literature by looking at processes of medicalization in a comparative perspective. Further, this research highlights the importance of institutional arrangements and macro-processes to understand how and why mental health has been medicalized in different societies. I use an integrated methodological approach consisting of multiple sources of data and multiple methods. The dissertation has two components that together advance our knowledge of both quantitative and qualitative aspects of medicalization in a comparative perspective. Specifically, this dissertation has three aims. The first aim is to provide descriptive overview of the extent of medicalization around the world. The second aim tests the effects of globalization and the welfare state on medicalization. These aims will be reached by conducting multivariate analysis on quantitative data, primarily from the World Health Organization (WHO) and the Organisation for Economic Co-Operation Development (OECD). The third aim is to generate further hypotheses regarding processes of medicalization. This aim is reached by a case study of medicalization in Iceland, a society which only recently, but dramatically embraced a medicalized view of social behavior. Conducting the study in Iceland allows the possibility of gathering nearly complete dataset of key players involved in processes of medicalization. Further, the country has comparatively equal balance between the key actors of interest in this dissertation: the state and the medical profession.

The *scientific merit* of this project lies in its’:

1. Reconceptualization of the notion of medicalization in a comparative perspective,
2. More fully developed synthesis of the insights of medical sociology and general sociological theory by putting processes of health and illness into a broader theoretical framework of globalization and the welfare state,

3. Advance of the research of the welfare state, by more fully considering one of the largest spending categories of the welfare state (health), still seriously under theorized in the welfare state literature,
4. Advance of the literature on globalization, by providing a link between macro-level global processes and micro-level actions of individuals using global ideas.

The *broader impacts* of this project include:

1. Development of data and measures that can tap global influences and medical control of social behavior,
2. A better understanding of how different institutional arrangements matter for individuals experiencing mental health problems across societies,
3. Generation of policy-relevant evidence on the medicalization of social behavior.

This dissertation is a part of a *research agenda* that seeks to better understand how global ideas about health problems interact with cultural and political ideas within a society, as captured partly by the social organization of the welfare state. The data collection for this dissertation is broad and rich in content, providing both the data for the dissertation and for additional questions in future work. I have received extensive methodological training, both at Indiana University and in the summer program in the quantitative methods at the Inter-University Consortium for Political and Social Research at the University of Michigan. These courses include categorical data analysis, linear models, simultaneous and structural equation models, scaling and dimensional analysis, network analysis, in-depth interviewing and demographic methods.

In what follows, I discuss (1) the conceptualization of medicalization and the theoretical background of the dissertation, (2) the research design, (3) the scientific significance of the research, and (4) progress to date.

CONCEPTUALIZATION AND THEORETICAL BACKGROUND

The sociological perspective offers an understanding of how the world is socially constructed, while taking into account the importance of social organization and historical processes. Specifically, how individuals and societies understand, define, and react to health problems is embedded within the social environment (Brown 1995; Freidson 1970; Goffman 1961; Horwitz 2002; Scheff 1966; Zola 1972). As pointed out by Kleinman (1988), mental illnesses are real but they are outcomes of the interaction of the physical world and the symbolic world of meaning. Furthermore, mental health problems have increasingly been recognized as one of the main health threats of modern societies, with mental illness constituting 11% of the global burden of disease and major depression alone ranking fourth (Murray and Lopez 1996).

Medical sociologists, and other scholars, have used lenses of medicalization to explore how social behavior has increasingly been moved into the medical jurisdiction (Conrad and Schneider 1992; Conrad 2000; Foucault 1965, 1973; Zola 1972). Although reliance on the medical profession is a general process in modern societies, the concept of medicalization applies specifically to deviant behavior. In particular, it illustrates how definitions of deviance have changed throughout history and are increasingly defined in medical terms. This tendency crystallizes in the medicalization of social behavior in the field of mental health which provides an insight into the social construction of health and illness. Comparative studies are essential to understand the interplay between social construction and social organization, since they shed light on which processes are a unique product of a given institutional and historical arrangement and which processes are more generalizable across societies. Specifically, this dissertation applies the notion of medicalization in a comparative framework, bringing to bear theories of globalization and the welfare state to understand how medicalization takes place within and across societies. Here, as limited space precludes a thorough treatment of these rich theoretical

frameworks, I sketch the theories. Although insights from other literature (for example Mechanic and Rochefort 1996; Mechanic forthcoming; Scott et al. 2000; Stevens 2001) are important, I focus on the synthesis of theoretical ideas I bring to the study of the medicalization of social behavior. The complete theoretical model, developed by the CO-PI, guiding this dissertation is provided in Appendix 2.

Medicalization: “Medicalization consists of defining a problem in medical terms, using medical language to describe a problem, adopting a medical framework to understand a problem, or using a medical intervention to “treat” it.” (Conrad 2000:322). Early on, Zola (1972) pointed out that medicine is replacing religion and the legal system as the major institution of social control, serving as the system of truth, where objective judgments are made based on expertise. Conrad and Schneider (1992) argue further that a variety of human “problems”, including but not limited to mental illness, have been medicalized in modern societies. I argue that this conceptualization is too limited when applied to other societies, since it does not take into account the countervailing powers interacting with the medical profession, such as different players that have a stake in the health care industry, such as the government, insurance companies, and pharmaceutical companies (Light 1993, 2000). Although, Conrad and Schneider (1992) acknowledge the importance of considering processes of medicalization in a comparative perspective, by pointing out that ideas do not develop in a vacuum, but are generated and elaborated in a specific social milieu. Further, they argue that important American values align well with the medical model of deviance since medicalization creates new markets and can be highly profitable in a capitalist society.

Scholars have pointed out that Americans differ from other nations on several important dimensions (Bobo and Smith 1994; Esping-Andersen 1990, 1999; Feldman and Zaller 1992; Lipset 1996; Mosesdottir 2000; Sainsbury 1996; Sears et al. 1997; Shapiro and Young 1989; Warner 1993) and the historically powerful American medical profession coupled with comparatively weak state is likely to result in different processes of medicalization in the U.S. than in other societies (Pescosolido and Martin 2004). This leads to my conceptualizations of medicalization, which is divided in two components: *Professional-Centered Medicalization* and *State-Centered Medicalization*. The former conceptualization is the same as Conrad’s (2000) but the latter focuses on the state as a countervailing power. The definition of state-centered medicalization is highly related to what is viewed as the common good of society as a whole and is manifested in whether causes of problems and solutions to them, should be individualistic or societal. In this form, medicalization acknowledges biological reality of mental health problems, yet defines a problem using societal terms, uses societal language to describe a problem, adopts a societal framework to understand a problem, or uses a societal intervention to “treat” it. Although, the conceptualization has two dimensions, it is important to think about national reality as a more complicated picture, where countries do not represent a complete ideal type of a professional discourse compared to state discourse. Rather, some countries have an overarching professional discourse; others overarching state discourse and others fall in between on the continuum. Further, different players within the same society are likely to have different discourse. Specifically professionals across national boundaries are expected to have a more similar professional discourse, where the most important cross-national difference is expected to be found among state officials and the popular discourse within a society.

Globalization: Researchers interested in globalization have employed various theories attempting to understand increased similarities across as diverse sectors as education, medicine, and environmental issues across national boundaries. This dissertation relies most heavily on the perspective of world polity theories, where the key proposition is that: “Many features of the contemporary nation-state derive from worldwide models constructed and propagated through global cultural and associational processes” (Meyer et al. 1997:144-45).

This perspective argues for the existence of worldwide models that define and legitimate agendas for local action, shaping structures and policies of nation-states across several important domains of modern societies, including medicine (Meyer et al. 1997). Most importantly, for this dissertation, this perspective highlights the importance of International Non-Governmental Organizations (INGOs) in promoting ideas on a global scale. Boli and Thomas (1999) argue that a study of INGO structures, purposes, and operations allows for the identification of fundamental principles of world culture, specifically how the ideas they promote shape the frames that orient other actors, including states. Although world-polity researchers clearly acknowledge the importance of health care in the globalized world (for example Boli and Thomas 1999), scant research has focused on health and medicine (for exceptions see Castella 2004).

The Welfare State: Welfare state researchers have devised useful categorizations of nations based on factors such as the generosity of the welfare system and the broad ideologies guiding the system (Esping-Andersen 1990, 1999; Esping-Andersen, Gallie, Hemerijck, and Myles 2002; Huber and Stevens 2001; O'Connor, Orloff and Shaver 1999; Wilensky 2002). The most widely used scheme to categorize nations based on their welfare systems is Esping-Andersen's (1990) notion of the three worlds of welfare capitalism. He classifies nations as liberal, conservative, or social democratic, and uses the effort put forward by the state to correct inequalities in the market to guide his classification. The state is both a system of stratification and an important creator of social relationships within a country. Welfare state theorists have made important contributions to our understanding of societies and their theories have been used to inform theories of stratification and political processes. However, they have been remarkably silent when it comes to issues of health and illness, despite the fact that health expenditure is one of the largest expenditure categories in all Western, industrialized countries. As pointed out by Korpi (1989), sickness insurance is a central aspect of social rights in the welfare state, but researchers frequently ignore these issues when theorizing about the welfare state. Given that health is one of the most valued "properties" in rich nations, understanding how states might increase, maintain or decrease health inequalities among their citizens is an important dimension for understanding the welfare state as a system of stratification and encourages more accurate classification of welfare states.

Key Research Question: The key research question in this dissertation is: What are the effects of globalization and the welfare state on medicalization of social behavior? I answer this question with a comparison of multiple country-level indicators of medicalization which I analyze across a large number of nations at one point in time and in a smaller number of strategically selected countries over time. I also explore processes of medicalization in more depth in one country to better understand how processes of medicalization take place and to generate hypothesis for these processes that can be tested in a larger sample of countries.

Globalization is expected to affect professionally-centered medicalization. Specifically, countries that are more tied to the global network are expected to have higher levels of medicalization. However, the forces behind globalization are theorized to be more professionally-centered. Therefore, globalization could have more impact on professionally-centered medicalization. The welfare state is expected to affect state-centered medicalization. Specifically, more generous welfare states (social-democratic, more generous benefits) are expected to have more publicly available mental health resources. Due to space limitations, the specific hypotheses and expectations regarding them are provided in Appendix 3.

PROJECT DESIGN

The sociological community is increasingly calling for multi-level and multi-method approaches. This dissertation simultaneously responds to recent demands within the field and more importantly, provides a more appropriate strategy of bringing empirical evidence to bear

on the research questions. Specifically, the methodological approach combines quantitative and qualitative methods and multiple sources of data and is especially well suited to evaluate the impacts of globalization and the welfare state on medicalization at two levels. These are: (1) macro-indicators of medicalization, capturing cross-national variation in mental health resources, the availability of medical professionals, pharmaceutical sales, and policy making and (2) micro-level in-depth interviews in one country, capturing how key players within one society use global ideas at the national level, and how these ideas interact with the particular arrangements of the welfare state. Thus, this dissertation moves from the broader macro-level to the narrower, more in-depth micro-level, to more effectively understand and explain each level.

Selection of Countries: This dissertation uses three different samples of countries, to best take advantage of the cross-national data available and to capture more in-depth processes than quantitative data allow. The macro-level quantitative analysis uses two samples of countries. The first sample takes advantage of the largest relevant universe (Ragin and Becker 1992) and consists of 71 countries, defined as belonging to a higher middle or high income group by WHO. Appendix 4 shows variation of medicalization on one dimension of medicalization, density of psychiatrists, for all WHO member countries. The data clearly indicate the scarcity of psychiatrists in the lower income countries, thus issues of medicalization are eclipsed by resource scarcity. The second sample of countries focuses on countries that are relevant for one of the key interest of this dissertation, the welfare state, and consists of 19 OECD countries that have certain measures available from 1970-2000 and are advanced welfare states, making the more fine-grained welfare analysis applicable. A list of countries included in both samples is provided in Appendix 5.

The case study is conducted to refine theories of medicalization and to generate new conceptual categories (Ragin and Becker 1992). Iceland provides an especially interesting case for exploration of the interaction between the welfare state and globalization regarding mental health issues. *First*, its small population and location between the U.S. and Europe, makes it especially susceptible to global influences, where it can be argued that it represents an ideal case for how globalization processes take place. Related to this, Iceland is a prime example of Braithwaite's (1989:185) description of the "good society", a society that is committed to both individual rights and collective duties. Icelandic society is deeply committed to collective social values (Olafsson 1996), while having well-documented cultural ideals of individualism (Durrenberger 1995). *Second*, Iceland is simultaneously firmly located in the social-democratic welfare regime, with similar welfare system and ideology as the other Nordic countries but more strongly tied to the United States than other Nordic countries. Therefore, the country provides an ideal case for testing out contrasting ideas promoted in different welfare regimes and how and why certain ideas gain or lose within a society that is strongly linked to both forms of ideas. *Third*, Iceland is a typical Western nation, with developed welfare system, high living standards, well educated population, positive health outcomes, and among the richest nations in the world. The size and homogeneity of the population, which is argued to be a logistical/practical advantage for the research design of the research design, is the only major factor that sets Iceland apart from other rich, Western democracies. *Fourth*, the best educated individuals in the country have received their education abroad, making effects of globalization especially prominent. Specifically, Icelanders are most likely to seek higher education (partly at the M.A.-level and exclusively at the Ph.D.-level) in other Nordic countries (about 50%), the United States (about 25%), and other European Countries (about 25%), especially in the United Kingdom, followed by France or Germany. This fact brings in a variety of global ideas as well as national ideas from other countries into Iceland, making it possible to test how national actors use knowledge they acquire abroad and to test whether there is a hierarchy of knowledge within Icelandic society. *Fifth*, the data on the ideology of medical professionals and state officials has the potential to be linked to a 16-country study on public attitudes about mental health problems.

The PI on this dissertation is the PI on a NIMH-funded 15-country study, and in collaboration with the PI, the Co-PI has secured funding to add Iceland as the 16-country. *Sixth*, while Iceland has all the same stakeholders as other countries, the size of the field makes it possible to interview all key players within a single society, a task much more difficult and less comprehensive in other societies. *Seventh* and related to the last point, the access to key players is easier than would be the case in most other societies.

Therefore, the research design allows simultaneously for the use of theory to make sense of cross-national evidence regarding medicalization and to use empirical evidence from one case study to sharpen and refine theory (Ragin and Becker 1992).

Data Sources: Data for this dissertation come from multiple sources. First, information on all mental health INGOs is obtained for the *Yearbook of International Non-Governmental Organizations*. The cross-sectional data available in 2000 comes from the *WHO Mental Health World Atlas*. The over-time analysis for 20 countries relies most heavily on data provided by the OECD, specifically *OECD Health Data 2002*. Additionally, I take advantage of measures available in the Comparative Welfare States Data Set (Huber, Ragin and Stephens 1997) and along with the PI, I am obtaining data on sales of antidepressants in these 20 countries over time. The second part of the dissertation consists of in-depth interviews with 100 key players in the mental health field in Iceland. Further details on all the sample, recruitment, and data collection are provided in Appendix 6.

DEPENDENT VARIABLES

The key dependent variable in this dissertation is the medicalization of social behavior. As with all comparative research, issues of comparability are crucial. Therefore, this dissertation does not rely on one dependent variable to look at medicalization cross-nationally, rather takes advantage of cross-sectional dataset that is available for multiple countries in 2000 and over-time data that is available for fewer countries over-time.

Seven dependent variables of interest are available for multiple countries in the year 2000. Together, these variables provide a foundation for a general analysis of the levels and type of medicalization. First, prevalence of medical and non-medical mental health providers capture the levels of medicalization as measuring professionalization of the mental health field: (1) number of psychiatrists per 100,000 population; (2) number of psychiatric nurses per 100,000 population; (3) number of psychologists per 100,000 population; and (4) number of social workers per 100,000 population. Second, the type of medicalization is measured with the public/private divide in the mental health field indicated by: (1) whether the country has a mental health policy or system; (2) whether the country has financial benefits for mental health patients; and (3) the source of primary funding for the mental health system.

Eight dependent variables are available for a limited number of countries over-time. Of those, three represent availability of mental health services and use of those services: (1) the number of psychiatric beds per 1,000 population; (2) the average length of stay for mental health problems; and (3) pharmaceutical sales. The over-time analysis also takes advantage of information from the dataset on globalization, where number of INGO membership is analyzed as an intermediate variable, specifically participation in mental health INGOs is affected by several of the control variables proposed in the model, but the key interest of the dissertation lies in how these measures affect other measures of medicalization within the country. This set of dependent variables provides a unique opportunity to measure professional-centered medicalization versus state-centered medicalization quantitatively. Specifically, the variables are: (1) number of membership in Professionally-Centered mental health INGOs (2) number of membership in State-Centered mental health INGOs and (3) structural position in the INGO network. The three remaining dependent variables are more intended as a control, since they do not directly measure medicalization of mental health, but professional-centered medicalization compared to state-centered medicalization in general. The variables are: (1)

number of general practitioners; (2) generosity of sickness benefits; and (3) the percentage of public spending of total health care spending. The first variable is included, since the mental health system and the general health system are interdependently linked in most societies, in addition to the fact that general practitioners prescribe large proportion of psychiatric drugs (Jensen 2002; Kelleher 2000). The second variable is included since the only cross-national variable measuring mental health benefits across countries available only captures whether or not country has mental health benefits. Since the ideology of the welfare state is better represented by generosity of the welfare state rather than presence, this variable is included as a dependent variable, derived from the assumption that generosity of welfare benefits in general is related to mental health benefits in particular. The third variable is included to further test the importance of the public/private divide within the health care system. Further description of and variation on all dependent variables are provided in Appendix 7.

The in-depth interviews focus on processes of medicalization, specifically how global ideas interact with political and cultural ideas rooted in the welfare state within one society. This part of the analysis speaks to an important gap in both the globalization and welfare state literatures, specifically linking macro-level processes of globalization and/or the welfare state with micro-level action. For example, Boli and Thomas (1999) point out the importance of developing a better understanding of the interaction between global cultural structures and the actors embedded in these structures. Therefore, the final part of the dissertation does not have a dependent variable, per se, since the goal of this part is to generate hypotheses for further work, regarding how macro level indicators translate into national realities. The interview schedule for the in-depth interviews is provided in Appendix 8.

INDEPENDENT VARIABLES

Consistent with the theoretical model of the importance of globalization and welfare state for medicalization in a comparative perspective, the novel independent measures are related to those two macro-level progresses.

Globalization: As shown in the theoretical model, globalization is viewed as an intermediate variable; specifically the number of professionally-centered and state-centered mental health INGOs will be used both as a dependent and as an independent variable. The additional globalization measures are (1) number of membership with mental health INGOs that are non-regional; (2) number of ties with countries that are considered leaders among the mental health INGOs; (3) number of drug companies with offices in the country; and (4) foreign direct investment. The first two measures are included in accordance with the world-polity literature on globalization; that views INGOs as an important source of global discourse (see Boli and Thomas 1999). Further, it is important to capture the influence of major, largely U.S. based, pharmaceutical companies on the medicalization of mental health. Therefore, variables indicating location of an office of a drug company within a country and number of sales representatives within country are included. The last measure, foreign direct investment, is a standard variable measuring globalization (Alderson and Nielsen 2002) and is used in the analysis as a control, to capture general globalization processes, outside of the mental health field.

The Welfare State: Three measures are used to capture the generosity and ideology of the welfare state, specifically: (1) Welfare state regime; (2) GDP spent on health; (3) Percent private spending of all health care spending; and (4) Generosity of social benefits. The first measure is Esping-Andersen's (1990) classification of welfare states, intended to capture the broad ideology of the welfare state. The second and third independent variables measure health spending and proportion of private spending, capturing the overall levels of spending on health and the share of the state as a stakeholder in the health field. This is important, since regardless

of spending levels, countries with higher private spending on health should be more professionally-centered and less state-centered. The last measure captures the generosity of the welfare system by evaluating the effects of different social benefits on medicalization. The welfare state as an independent variable is only relevant for the 19 OECD countries, since a large proportion of the countries in the WHO data are not welfare states.

Control Variables: Space limitation prevents a description of every control variable to be used in every statistical model. Instead, I note that controls are drawn from the literature and the objective of the analysis is to estimate the impact of globalization and the welfare state on medicalization, net of other major determinants. Example of control variables that are included are: GDP per capita, size of population, educational levels, female labor force participation, life expectancy, proportion of population older than 65, mental health need and health system classification.

METHODS

The dissertation uses multiple methods. Below is a description of methods used for each part of the analysis.

The cross-sectional analysis for multiple countries in 2000 centers on several different medicalization outcomes. Two different methods are appropriate for this part of the analysis. First, the levels of medicalization captured by prevalence of mental health professionals are analyzed using Seemingly Unrelated Regressions (SUR) models. Although the set of explanatory variables are not necessarily identical in each analysis, there is substantial overlap in the predictors of medicalization. Since the regression errors from each equation are likely to be correlated within each country, I treat the equations as a multivariate system and use SUR to estimate the medicalization model. The SUR model assumes contemporaneous cross-equation error correlation. The advantages of using the SUR system are that it provides more efficient estimates and it allows hypothesis tests across equations, for example it allows for a test of statistical significance of globalization across equations. Second, the type of medicalization is analyzed using binary logit regression, a regression method appropriate for binary measures (Long 1997).

The over-time data are observed at the country-level, and thus subject to methodological challenges that are common in comparative research. Two key problems of this sort are heteroskedastic and auto-correlated errors, conditions that can render conventional OLS estimates problematic. To address these issues, I use Prais-Winsten regression with panel-corrected standard errors and an AR1 parameter that is constant across countries. This approach is informed by the important Monte Carlo work of Beck and Katz (1995) who find evidence that calls into question a variety of once-common statistical approaches to dealing with heterogeneity and auto-correlation. One such approach, for instance, is the Parks method, which involves estimation of country-specific error correlation parameters. However, as demonstrated by Beck and Katz (1995), this approach tends to underestimate standard errors by between 50 percent and 200 percent. The Prais-Winsten approach, by contrast, appears to perform better under the conditions frequently found in country-level datasets, providing the data are evenly-spaced and the number of years in the analysis is larger than the number of countries.

For the in-depth analysis, each interview will be transcribed and entered into ATLAS.ti. This program enables the researcher to uncover themes, organize data, and analyze complex events. Data analysis begins as soon as the data are entered into the program and will be ongoing throughout the research period (Maxwell 1996). The first step is to code the data according to both the themes that emerge and the themes that are expected. For instance, one of the interests lies in endorsement of professionally-centered medicalization versus state-centered medicalization. Each interview will be coded according to this scheme, evaluating who

is more likely to endorse one compared to the other. The second step is to evaluate interviews within professions as a whole, to estimate what kind of discourse is most profound within each profession. The third step is to look at the interviews as a whole, to understand the broader mental health discourse.

SCIENTIFIC SIGNIFICANCE

I am interested in the intersection of theories on medicalization, the welfare state, and globalization. Recently, medical sociologists have paid much attention to explaining health outcomes at the individual level, although several medical sociologists have called attention to the importance of a more societal approach (Mechanic forthcoming). I argue that debates on health and illness can benefit from putting these issues within the framework of welfare state regimes and in particular by contrasting them with globalization. Additionally, an attempt must be made to link the different levels where these processes take place, specifically the macro-global level, the meso-national level, and the micro-national level. Conversely, despite health being one of the largest expenditure categories of all Western, industrialized nations, researchers have largely ignored health care when classifying them into welfare regimes and when exploring global networks and discourse. In the dissertation, I will link these three sociological traditions and discuss how each benefits from this integration.

More specifically, the research provides a new direction for theories of medicalization, adds to our understanding of how societies and individuals within these societies frame issues and construct ideas about health and illness and how this combination of biological reality and social construction might affect individuals experiencing mental health problems. It also sheds light on whether medicalization is more likely to follow globalization trends or be tied into welfare regimes, and whether this might be different for different dimensions of medicalization. Finally, it provides insights into how different actors interact with one another within a society, how people formulate and use their ideas, and how this produces the reality faced by individuals living in a given society.

PROGRESS TO DATE

As stated previously, this dissertation is a part of a larger research agenda. Below, I will describe the progress to date on each component of the dissertation and, when applicable, the key preliminary findings.

The dataset for the multivariate analysis are largely composed. All key variables have been entered in the dataset; however, should better or more fine-grained measure become available these will be entered as appropriate. The preliminary findings regarding this section are that globalization matters for medicalization as it relates to availability of mental health resources, especially in countries that fall in the middle regarding development. Simply stated, that countries that already have developed to a certain point are capable of taking advantage of global ideas. That does not matter for the worst-off countries or the best-off countries. Conversely, the welfare state measures are more important than globalization measures in the most advantage countries. The analysis and write-up for this part of the dissertation will be completed and given to dissertation committee members by April 15th, 2005. Further, I have composed an additional dataset which includes details on the mental health INGO network. In that analysis, I use models on joint networks (Wasserman and Faust 1994), to display structural dimensions of the mental health INGO network. Although, the structural analysis of the network per se will be a separate publication, it provides the dissertation with both the measures of globalization and a larger context for the proposed analysis.

I have completed 10 preliminary interviews in Iceland. The respondents were psychiatrists, occupational therapists, and parliamentarians from three different parties in Iceland (left-green, social-democratic, and progressive). The government in Iceland consists of the progressive party and the conservative party, thus the interviews capture potential ideological differences

across parties as well as between governing and non-governing parties. However, the perspective of members of the conservative party is crucial and interviews have already been scheduled with members of that party. The data collection revealed, as I had expected, that getting in contact with and obtaining interviews with these key players in Iceland would be relatively easy. As an example, I e-mailed the chief of the main psychiatric hospital in Iceland, who responded in 5 minutes, suggesting an interview that same week. I have already received a confirmation of participation by 15 other respondents, including psychiatrists, general medical doctors, psychologists, and parliamentarians representing each of the major parties in Iceland (additional members of the ones I have already interviewed members of and the conservative party). The data collecting in Iceland will be conducted in July and August 2005, and if needed in December 2005-January 2006. The preliminary interviews provided interesting insights into how people use global ideas within their fields. One of the most important findings thus far, is that the discourse of the psychiatrists is more professional, medicalized, and globalized than the discourse of other respondents. As an example, they were much more likely to draw on biological reality and to discount the importance of similarities of countries in evaluating whether ideas were applicable in Iceland. Specifically psychiatric findings are applicable regardless of whether they are obtained by Swedish, German or American psychiatrists. Conversely, the discourse of both the occupational therapists and parliamentarians was embedded within the specific national settings. They deemed ideas from other Nordic countries as being more applicable in Iceland and were more likely to draw from state-centered discourse on medicalization to express their ideas about the causes and consequences of mental health problems. The interviews further revealed a tension expected to be found in countries with a more encompassing welfare state. Specifically state officials were frustrated by the power of psychiatrists and very skeptical of the pharmaceutical industry whereas psychiatrist were frustrated by the constrains they faced by the government and felt relatively powerless as a profession within the welfare state. Examples of data from the interviews are provided in Appendix 9. This finding has implications for the future relationship between the medical profession, the state, and insurers in American society. The reality faced by American doctors is increasingly assimilating those of medical doctors in other societies, where they face more state regulation than has been the case in the U.S. thus far. As importantly, the work done thus far on the dissertation and findings from other papers by the PI and Co-PI, suggest: "That not taking the cultural tradition of medicine as a central social institution in modern societies into account when developing classifications of nations in a comparative perspective is problematic for the further development of sociological theories and could potentially result in both misleading and underdeveloped understanding of national clustering" (Olafsdottir, Pescosolido, and Kikuzawa 2005).

TIMELINE

Compose cross-national dataset	Completed – January, 2005
Preliminary interviews in Iceland	Completed - September, 2004
Complete interviews in Iceland	July-August 2005, December 2005
Analysis of Aim 1	January-March, 2005
Analysis of Aim 2	September 2005-May, 2006
Analysis of Aim 3	June-December, 2006
Revise and Complete Dissertation	January-April 2007
Dissertation defense	May, 2007

