

## **SPECIALIZATION AND DESPECIALIZATION IN PSYCHOLOGY: DIVERGENT PROCESSES IN THE THREE WORLDS**

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This paper raises some fundamental questions about the consequences of specialization in the discipline of psychology, as well as the psychological consequences of specialization. Increasing specialization is taking place as a result of wide-ranging psychological and societal factors, rather than strictly scientific criteria. Among the consequences of increasing specialization are fragmentation in psychology, and microcosmic, rather than wholistic, models of behavior. Some third world psychologists trained in the first and second worlds are moving toward despecialization, in order to tackle major social problems that invariably require a wholistic approach. It is proposed that despecialization has potential benefits for all of psychology.

Increasing specialization is a central feature of modern societies. Like other areas of human activity, the domain of psychology is becoming increasingly specialized, with new specialties and sub-divisions of the discipline emerging constantly (Hearnshaw 1987). The process of increasing specialization in psychology is being shaped mainly by events in the United States, the first world, with the other industrialized nations, the second world, having less influence, and the third world countries having the least influence (Moghaddam 1987a, 1988). However, there are indications that the growth of indigenous third world psychology will lead toward despecialization (Moghaddam 1987b). There is a need for students of psychology in its international context to pay greater attention to processes of specialization and despecialization in psychology. This paper represents a modest attempt at stimulating further discussion in this area.

\* I am grateful to Jane Stewart for her constructive comments on some of my views concerning specialization and despecialization.

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In particular, I shall elaborate on the consequences of increasing specialization and discuss the concept of despecialization and its potential importance. The process of despecialization is most evident in the third world context, but this concept also has profound implications for the first and second worlds.

In the first part of this paper, I shall briefly review some historical factors leading to increasing specialization in psychology. A major claim in this discussion will be that not only scientific, but also a wide range of psychological and societal factors have influenced the trend toward greater specialization. The second section of the paper will review the growth of psychology outside the first and second worlds, and discuss how the emergence of indigenous third world psychology is leading toward despecialization among third world psychologists. I shall argue that this process will have beneficial outcomes for psychology in all three worlds. In the final section, I shall discuss in greater detail the psychological consequences of specialization and further explore the concept of despecialization.

### **Increasing specialization in psychology**

The rapid growth of scientific psychology around the globe (Pawlik 1985; Rosenzweig 1984; Sexton and Misiak 1976) and particularly in the United States (Stapp et al. 1985) has been accompanied by increasing specialization in the discipline. In contrast to the claim that there are 'no specialties' in psychology (Matarazzo 1987), I shall argue that there have evolved scores of specialized areas in psychology, each with their own institutional structures, conferences, and publication outlets. This trend is reflected, for example, by the 47 divisions in the American Psychological Association, and the multitude of new journals that have appeared in the last decade. Specialization in scientific psychology should be viewed in the wider context of industrialization and the divisions of labor evolving in most areas. Such a perspective will allow us to recognize more readily the wide range of factors that influence specialization.

The trend toward greater specialization can be usefully evaluated in the context of increased competition for scarce resources. Adapting the ideas of Darwin (1859), Durkheim (1933) elaborated on the implications of competition for divisions of labor in society. As increased numbers of people enter an employment sector, the competition be-

tween individuals becomes greater. This leads individuals '... to specialize in a function which cannot readily be displaced by another' (Simmel 1959: 420).

Researchers have documented the process through which increased competition leads to specialization, differentiation, and the search for new areas, 'vacant spaces' in Darwinian terms, among members of different communities. Thus, for example, Mulkay and Turner (1971) discuss the process of competition and differentiation in three diverse settings: Islamic Saints in North Africa, French painters, and North American scientists. While each of these contexts has special characteristics, the social differentiation that takes place due to increased competition follows very similar paths. Analyses of competition in science (for example, Hagstrom 1974) and the social sciences (for example, Starr 1983) demonstrate that similar processes of social differentiation are evident among modern research communities.

Hence, differentiation in research activity is partly a consequence of competition in science. The emergence of new specialities presents an opportunity for greater numbers of researchers to make a recognized contribution to a scholarly field. New researchers are encouraged to seek 'vacant spaces' through which they could increase their opportunities for making an impact in a scientific domain.

The motivation to achieve differentiation and occupy 'vacant spaces' leads researchers to give consideration to a host of diverse factors when selecting research areas and strategies. Findings suggest that many of the factors that influence researchers in their selection of research topics and strategies lie outside the criteria of logico-empirical science (Garvey and Tomita 1972; Gieryn 1978; Hagstrom 1974; Mulkay et al. 1975; Merton and Lewis 1971; Starr 1983; Stehr and Larson 1974; Zuckerman 1978). Consequently, 'what' researchers study and 'how' they carry out their studies is influenced in important ways by a wide range of factors that are not traditionally regarded as being 'scientific' criteria. Such 'non-scientific' criteria include the availability of funding, researchers' perceptions about the degree of competition for priority in a particular domain, as well as a number of other psychological factors.

For example, the psychological motivation to achieve a distinct identity is influential in the move toward social differentiation and the search for new, unexplored research areas in science. This need for a distinct identity is central to social identity theory, a theory developed by European researchers (Tajfel and Turner 1986). Interestingly, the

need for distinctiveness has also been interpreted as being an influential factor leading European researchers to develop European social psychology as distinct from North American social psychology (Moghaddam 1987a; Taylor and Moghaddam 1987).

The factors leading to specialization, therefore, are not limited to objective criteria, but include psychological, social and economic forces. Also, the wide ranging factors influencing specialization are directly tied to the particular social context in which a specialization has evolved. The specialized researcher is the product of a particular type of industrial society, with highly developed institutionalized structures and professional associations for supporting research (Collins 1979).

Attempts to transfer the role of specialized researcher to third world societies face major challenges. This is not only because the institutional structures necessary to support such a role tend to be weak in third world societies, but also because these societies have not yet evolved effective mechanisms for assimilating the products of specialized research. These factors have led some researchers to question the effectiveness of the present system through which third world psychologists receive specialized training in the first and second worlds (Moghaddam and Taylor 1987).

In summary, although the influence of competition on the behavior of scientists is seldom acknowledged by researchers themselves (for some exceptions, see Reif 1961; Watson 1968), the move toward greater specialization in psychology can be most usefully understood in the context of industrialization and increased competition. Rapid increases in the numbers of psychologists has led to greater competition, social differentiation, and the identification of 'vacant spaces'. As a consequence, individuals receiving advanced training in psychology tend to move into ever narrower areas of specialization, partly because in this way they are more likely to make a recognized contribution to a scholarly domain. Third world psychologists trained in the first and second worlds follow this same path of specialization, but invariably face a new set of challenges when they return to work in their own third world societies. As a result of confronting these challenges, third world psychologists often move toward despecialization.

### **Specialization and despecialization among third world psychologists**

Modern psychology did not evolve in third world societies, but was exported there 'wholesale' from the first and second worlds (Moghad-

dam and Taylor 1985, 1986). Psychological knowledge was imported into third world societies just like any other developed world product was imported, to be disseminated through universities that had often been established as replicas of those existing in the first and second worlds. However, just as the consumer products and the factories exported to third world societies often tend to be behind the times and second-rate, the psychological knowledge and the universities exported to the third world have also tended to be behind the times and less sophisticated than their first and second world counterparts (for a discussion of the societal processes associated with these events, see Altback and Kelly 1978). Third world psychologists trained in the first and second worlds have been the most important instruments through which the exportation of psychology to third world societies has taken place.

The training of third world psychologists in the first and second worlds has been undertaken with almost total disregard to the needs of third world societies (Moghaddam and Taylor 1987). Typically, such training involves third world students in research addressing questions that have arisen in the context of first and second world societies. The research questions addressed are often only indirectly relevant to the needs, intellectual or otherwise, of third world societies. Also, the instruments and techniques used in this research tend not to be available in the third world, and the research results often cannot be assimilated or utilized by institutional systems available in the third world. In the area of teaching, third world psychologists have to meet far heavier teaching commitments than their first and second world colleagues, and they often have to teach on topics that are well outside their areas of specialization. Consequently, after returning to their own third world societies, third world psychologists trained abroad invariably abandon the idea of continuing research in the specialized area that they had received advanced training.

After becoming familiar with the experiences of other western trained third world psychologists, either through published reports (e.g., UNESCO 1980) or direct discussions, I have concluded that my own experiences are not atypical. As a British trained third world social psychologist, I returned to Iran with plans to continue research on social categorization and intergroup relations. However, I was immediately confronted by a number of challenges. Although I could overcome the lack of laboratory and computing equipment through

ingenuity and a move toward field studies, a far more fundamental challenge arose when I realised that there was an urgent social demand for psychologists to act as generators of societal change, rather than as analysts of relatively small and, what appeared in the third world context to be, trivial bits of behavior.

Like many third world psychologists trained abroad, I found that I had to re-train myself in order to work in a third world society. Most importantly, I had to try to adopt a wider theoretical perspective and struggle to come out of the narrow groove of research into which my training had placed me. Gradually, I moved toward despecialization, and subsequently discovered that some of my third world colleagues, particularly those interested in the applied role of psychological knowledge, have undergone a similar process.

In part, despecialization takes place among third world psychologists because of the special demands on psychology by third world societies. A key challenge facing third world societies is a lack of societal change, and an important demand made of third world psychologists is that they should help generate such change. Thus, indigenous third world psychology has been described as being 'generative' (Moghaddam 1987b). However, the challenge of generating societal change cannot be taken up effectively by researchers who have a narrow perspective and work on microcosmic aspects of behavior. As Sinha has noted, 'If psychology wants to make a significant impact on the problems of Third World countries it has to adopt a more global orientation, a macrocosmic perspective...' (1986: 113).

However, it is not only in the third world that psychologists must despecialize in order to make an impact on the major problems of society. In the first and second worlds as well, the challenge of tackling important societal issues, including racism, sexism, poverty, and the plight of disadvantaged groups, can only be taken up effectively by researchers who adopt a global perspective and include societal factors in their models. The so-called 'crisis' in social psychology (Armistead 1974; Nederhof and Zwier 1983) arose in part because increasing specialization resulted in a focus on minute bits of behavior, within the context of very limited theoretical models.

To summarize, third world psychologists trained abroad often return to their own underdeveloped societies to find that being a specialist in a narrow research area can act as a hindrance, rather than a help, in the challenge of tackling major social problems. The demands of third

world societies on psychologists, particularly in terms of teaching, lead many third world psychologists to move toward despecialization. However, the implications of despecialization are not limited to the third world. Researchers interested in the relation between psychology and major societal issues in the first and second worlds would also find it useful to consider the potential benefits of despecialization.

### **Specialization: Some notes on its psychological implications and its implications for psychology**

The task of exploring the psychological consequences of specialization has been taken up by sociologists and political scientists more so than by psychologists. There is a strong tradition, going back at least to the mid 19th century, for some sociologists and political scientists to argue that the capitalist forms of production and divisions of labor lead to the alienation of workers and the stagnation of humankind's creative potentials. This line of thought is particularly evident in Marx's (1973) earlier writings, such as the *Economic and philosophic manuscripts of 1844*. Marx (1973) argued that in capitalist forms of production and divisions of labor the worker becomes alienated from his/her work. Not only do the owners of capital control the means of production, but they also appropriate the products of the workers' labor, so that the workers are confronted by the fruits of their own labor in a hostile manner (see Allman 1971).

The concept of alienation was further explored in Mannheim's (1940) important work, *Man and society in an age of reconstruction*, and remains a focus for much critical sociological inquiry (e.g., Allman 1978; Allman and Vermoff 1982; Blauner 1964; Faunce 1968). The discussion on alienation has extended to elaborations on different types of alienation, such as Faunce's (1968) distinction between normlessness, powerlessness, and meaninglessness.

In the psychological literature, the consequences of capitalist forms of production and divisions of labor have been explored particularly by radical Freudians, such as Reich (1946) and Marcuse (1969, 1972). The social psychological dimensions of alienation arising from divisions of labor have also been examined (Isreal 1971). Marx's influence is evident in these discussions, which focus particularly on the feelings, perceptions, and motivations of alienated individuals. Some of the

cognitive consequences of divisions of labor, and particularly of the extreme forms of specialization that have evolved in modern societies, have received less attention. This neglect also originates from Marx's influence.

The concept of alienation as developed by Marx linked the psychological state of the individual to the social structure. As such, it was an objective concept, primarily concerned with processes outside rather than inside the individual. Also, Marx considered alienation as an outgrowth of the worker's relationship with the means and outputs of production, as well as the system of divisions of labor in the capitalist system. An alternative approach would be to consider the personality and cognitive consequences of divisions of labor and increasing specialization, irrespective of the political structure of the society in which specialization is taking place.

What, if any, influence does increasing specialization have on the personality of individuals? We know that certain social roles and patterns of behavior are associated with specific types of work. This knowledge forms a basis for stereotypes, so that if I am about to meet an accountant, for example, I have a number of fairly stable expectations about the patterns of behavior the accountant will manifest. In the process of 'becoming' an accountant, new recruits to this profession learn about the appropriateness of different types of behavior and conform to what is more appropriate for their role. In some fundamental ways, they shape their behavior, attitudes and perceptions to fit the social role of 'accountant'. This raises the more general question of whether the process of becoming specialized in the thousands of research and career paths that exist today is influencing the personalities of individuals in modern societies. Researchers might tackle this question through a historical perspective, much like that developed by McClelland (1961) in his analysis of the achievement motive during various historical periods.

Similarly, we might ask, does specialized training lead to particular cognitive styles? For example, would specialists who have narrowed their research domains to very limited topics be any less or more effective than 'generalists' at conceptualizing issues that require a macro perspective? There exists very little research evidence to help us tackle such questions. Intuitively, one might assume that specialization leads to a 'tunneling' effect, so that the researcher becomes increasingly confident about knowing more and more about a specific narrow topic.



This tunnel vision might also lead the researcher to exaggerate the explanatory power of the few relatively minor variables included in his/her studies. As a consequence, events become filtered and interpreted through this microcosmic model of the universe. Unfortunately, social psychology has been particularly affected by this process.

Social psychology has been the fastest growing area of psychology in third world countries, such as India (Sinha 1986). This is mainly because, on the surface at least, social psychology seems most relevant for tackling the major social problems confronting third world societies. However, contemporary social psychology remains impoverished in terms of social variables. There is very little that is 'social' about the fast growing area of social cognition (for a review, see Fiske and Taylor 1984), which often involves experiments directly adapted from cognitive psychology, with stimuli such as 'table', 'chair' and 'book' replaced by 'social' stimuli such as 'man', 'child' and 'woman'. These developments, I believe, are partly the result of tunnel visions that evolve through specialization.

While specialized researchers in the first and second worlds find support for their tunnel visions in the work of the numerous other researchers working in their immediate areas, their colleagues in the third world find themselves relatively isolated. Because there are so few researchers in the third world, it is more difficult for communities of specialists to form. This means that the mechanisms, such as research groups, conferences and journals, necessary for developing and utilizing specialized perspectives are not available. The isolated researcher finds it far more difficult to objectify his/her limited model of the world, resting as it does on a few selected variables. However, as the number of third world psychologists increases, the pressure on them to despecialize is likely to decrease, because they will find stronger institutional support for their roles and perceptions as specialists.

It may be timely for psychologists in all three worlds to take a step back and critically reassess the way in which specialization is taking place in their discipline. I believe that the experiences of despecialization among third world psychologists present a valuable learning opportunity for all psychologists. At this stage, it is useful to raise the question of whether the negative consequences of increased specialization do not outweigh its positive consequences for psychology.

From one perspective, which goes back at least to the classical economists and Adam Smith's (1937) *The wealth of nations*, first

published in 1776, increased specialization leads to greater productivity and rises in the standard of welfare in society. Thus, we might assume that in the field of psychology also, increased specialization will inevitably lead to more research output and greater knowledge. However, there are at least two important points that should be raised in this connection. First, modern economists have differentiated between different types of specialization and argued that a given type of specialization may not be equally suited to different contexts. For example, partly because of the nature of labor unions operating in each society, 'flexible specialization' is described as being less suitable for the United States than for West Germany, Japan and Scandinavia (see Stinchcombe 1987). Similarly, increasing specialization as experienced presently may not be equally beneficial to all the sciences, and I would argue that social psychology is one area in which it is less beneficial. Second, in the domain of psychology, as in many other fields of research, greater numbers of research studies do not necessarily lead to a better understanding of the topic under study. Quantity in research does not necessarily lead to qualitative improvements in our understanding of behavior.

A move toward despecialization among psychologists of the first and second worlds might lead to less fragmentation and more wholistic models of human behavior. From this perspective, it is not surprising that those researchers who have evolved more wholistic pictures of behavior are themselves less specialized. Indeed, there seems to be ample evidence from the history of psychology to suggest that the really important contributions to the understanding of behavior have been made by researchers who have avoided narrow specialization. I need not look far to furnish examples in support of this claim. The orientation of the psychology department at McGill, where I work, has been shaped largely by D.O. Hebb. Particularly through his important volume, *Organization of behavior*, Hebb (1949) has had a far reaching impact on mainstream psychology. The noted psychology historian Hearnshaw (1987) has stated that this book '... opened up many of the new vistas that now confront psychologists' (1987: 250) An examination of this work, as well as others by Hebb (e.g., see *Essay on mind*, 1980), clearly demonstrate that he cast his net wide and avoided the narrow kind of specialization that is increasing in psychology.

It may be argued that Hebb is among the giants in psychology, a privileged few who enjoy the ability to adopt a wholistic perspective.

The majority of us, it may be claimed, must act like worker bees, each contributing in a small way so that the sum of hundreds of thousands of studies will eventually lead to a global perspective. This atomistic view of scientific progress is both misleading and wasteful. It is misleading because it assumes that the worker bees are moving ahead in their own narrow paths according to scientific criteria whereas, in fact, a wide range of psychological and societal factors are pushing psychologists along the path of increasing specialization. This atomistic view is wasteful, because very little of what the worker bees produce is ever utilized, either in an intellectual or any other manner. The despecialization called for by indigenous third world psychology involves an attempt to deal with this waste.

In summary, while most areas of human activity, including psychology, are becoming increasingly specialized, the consequences of increasing specialization have been explored by sociologists and political scientists, rather than by psychologists. In particular, we have very little research evidence to tell us what kinds of cognitive, and perhaps personality, changes take place as a result of 'becoming' a specialist. We might speculate that this process will be associated with the development of tunnel visions, and perhaps more stereotypic behavior patterns. A consequence of specialization for the domain of psychology seems to be increased productivity as measured by numbers of research studies and publications. However, among other consequences are increased fragmentation, attempts to explain behavior by reference to a few selected variables that dominate each specialized area, and a lack of convincing wholistic models.

### **Concluding comment**

The objective of this paper was to raise a number of fundamental questions about increasing specialization in psychology. I hope that his discussion will make some modest contribution toward drawing greater attention to the implications of specialization in the three worlds. These implications are important and worthy of closer attention because increasing specialization is leading to fragmentation in psychology. Instead of wholistic approaches and general models of behavior, we have microcosmic models that rely on narrow research perspectives, each incorporating a few selected variables. The main factors leading to

increased specialization are greater competition, together with a host of other psychological and societal influences, rather than strictly objective criteria about the way in which science should progress. One of the consequences of fragmentation in psychology is that the discipline is not effective at tackling major social problems that confront the majority of the world's population, such as, racism, poverty, sexism, and illiteracy.

Indigenous third world psychology is evolving in response to the urgent challenges that confront third world societies. Part of the process of indigenization for third world psychologists trained in the first and second worlds is to break out of highly specialized research areas and progress beyond the tunnel vision that specialization often imposes upon individuals. I have suggested that the concept of despecialization also holds valuable lessons for first and second world psychologists. As an initial step, the concept of despecialization can help raise questions about the consequences of specialization, both for society generally and for the discipline of psychology specifically.

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Cet article soulève certaines questions fondamentales sur les conséquences de la spécialisation dans le domaine de la psychologie et sur les conséquences psychologiques de la spécialisation. La spécialisation s'intensifie à cause de facteurs sociaux et psychologiques variés et non pas strictement à cause de critères scientifiques. Parmi les conséquences d'une spécialisation accrue, on retrouve une fragmentation dans le domaine de la psychologie et les modèles expliquant le comportement tendent à être plutôt microscopiques que holistiques. Certains psychologues du tiers monde formés dans le premier et deuxième mondes se déspecialisent pour mieux s'attaquer aux problèmes sociaux d'intérêt majeur qui exigent invariablement une approche holistique. Il est proposé que la déspecialisation a des bénéfices potentiels pour toute la psychologie.