VIETNAMESE AMERICAN HIGH SCHOOL DROPOUT RATES: ETHNICITY AS INSULATION

Carl L. Bankston III, University of Southwestern Louisiana

ABSTRACT

This article addresses the question of why Vietnamese Americans show much lower high school dropout rates than the American population in general. It looks at two of the major explanations for failure to complete high school: family economic situation and family structure. It considers how the difference in dropout rates between Vietnamese Americans and the two large American racial groups (blacks and whites) may be related to differences in family income and family structure. The findings suggest that the low dropout rates among the Vietnamese do not result from economic or family structure characteristics of individual Vietnamese families. The findings suggest, instead, support for the position that an immigrant culture, understood as a distinctive pattern of social relations, can insulate young people from disadvantages in American society at large.

INTRODUCTION

The United States continues to show differences in educational attainment among its racial and ethnic groups. Minority students are less likely to complete high school than are members of the majority white group (Hacker 1992). However, one of the country's newest large minorities, Vietnamese Americans, shows surprisingly high levels of academic achievement (Caplan, Whitmore, Choy 1992; Rutledge 1992) and surprisingly low rates of failure to complete school (Bankston, Zhou 1994).

The 1990 U.S. Census shows that 49.3 percent of Vietnamese Americans between the ages of 18 and 24 were enrolled in college or another form of higher education beyond the high school level. By contrast, only 39.5 percent of white Americans and only 28.1 percent of black Americans in the same age group were in college. High school dropout rates among young Vietnamese Americans were also lower than those of other Americans. Only 6.5 percent of Vietnamese Americans from 16 to 19 were neither enrolled in high school nor high school graduates, compared to 9.8 percent of white American youth and 13.7 percent of black American youth (U.S. Bureau of the Census 1992b).

This article looks at two of the major explanations for failure to complete high school: family economic situation and family structure. It considers how the difference in dropout rates between Vietnamese Americans and the two large American racial groups (blacks and whites) may be related to differences in family income and family structure.

THEORETICAL BACKGROUND

The socioeconomic background of families has consistently been found to influence the educational attainment of young people. In their classic study of the relation between family and education, Jencks and his co-authors (1972) found that family economic status was closely related to the number of years of schooling completed by children. The poorer the family, this study found, the lower the educational attainment of its young. Rumberger (1983, 1987) found that nearly a quarter of black male dropouts said that they had dropped out for economic reasons. More recently, Armor (1992) has attributed the narrowing of the gap between blacks and whites in educational attainment to the growth of the black middle class.

Family structure has also been cited as an influence on the dropout rates of individuals and as a source of racial and ethnic differences in school completion. A number of commentators have maintained that single-parent families are a source of social dislocation (Gilder 1981; Moynihan 1965; Murray 1984). A substantial body of research suggests that family structure can have a strong direct effect on school performance, independent of socioeconomic status (Mulkey, Crain, and Harrington, 1992) and on behavior and attitudes relevant to school performance (Hong Li, Wojtkiewicz 1992; Sandefur, McLanahan, and Wojtkiewicz 1992; Wojtkiewicz 1993). Others have argued that the lower levels of educational attainment on the part of children from one-parent families are actually the results of economic factors (Acoc, Kiecolt 1989; Blechman 1982; Herzog, Sudia 1973; McLanahan 1985; Takeuchi, Williams, Adair 1991). Cherlin (1981) has maintained that the negative consequences of living in a female-headed household are not the results of the absence of a father as much as they are the results of living without a male income. Similarly, Milne, Meyers, Rosenthal & Ginsberg (1986) have maintained that living in a one-
Table 1: Selected Characteristics of U.S. White, Black, and Vietnamese Non-Householders Aged 16 Through 19

<table>
<thead>
<tr>
<th></th>
<th>Whites</th>
<th>Blacks</th>
<th>Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent not in school, not high school graduates</td>
<td>9</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Percent married or formerly married</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Percent of females who have had at least one child</td>
<td>4</td>
<td>17</td>
<td>2</td>
</tr>
<tr>
<td>Percent in married couple families</td>
<td>80</td>
<td>46</td>
<td>73</td>
</tr>
<tr>
<td>Percent living in household in which a parent is head</td>
<td>88</td>
<td>83</td>
<td>88</td>
</tr>
<tr>
<td>Percent living in a household in which a step-parent is head</td>
<td>8</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Percent living in a household in which a grandparents is head</td>
<td>3</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Percent living in a household in which sibling is head</td>
<td>1</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Percent living with a divorced parent</td>
<td>12</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>Percent living with a parent who has never married</td>
<td>0</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Mean number of persons per family</td>
<td>4.2</td>
<td>4.7</td>
<td>5.7</td>
</tr>
<tr>
<td>Median family income</td>
<td>$43,000</td>
<td>$24,000</td>
<td>$31,101</td>
</tr>
<tr>
<td>Median income of household head</td>
<td>$25,000</td>
<td>$12,000</td>
<td>$15,367</td>
</tr>
<tr>
<td>Mean years of education of father</td>
<td>10.7</td>
<td>9.5</td>
<td>9.2</td>
</tr>
<tr>
<td>Mean years of education of mother</td>
<td>10.4</td>
<td>9.7</td>
<td>7.8</td>
</tr>
<tr>
<td>Mean age of father</td>
<td>45.2</td>
<td>43.6</td>
<td>48.3</td>
</tr>
<tr>
<td>Mean age of mother</td>
<td>43.0</td>
<td>42.2</td>
<td>45.0</td>
</tr>
<tr>
<td>Percent US born</td>
<td>95</td>
<td>95</td>
<td>4</td>
</tr>
<tr>
<td>Percent Post-1980 immigrants</td>
<td>2</td>
<td>3</td>
<td>37</td>
</tr>
<tr>
<td>Percent speak English very well</td>
<td>97</td>
<td>98</td>
<td>58</td>
</tr>
<tr>
<td>N</td>
<td>15011</td>
<td>3808</td>
<td>2216</td>
</tr>
</tbody>
</table>

Source: US Census of Population and Housing, 5 percent public use microdata sample, 1990

Parent home affects family income, which, in turn, influences school outcomes. Both the socioeconomic and family structure explanations of dropping out of school assume that the behavior of children is largely influenced by characteristics of their own families. However, Bankston (1995b) has suggested that we should see ethnicity as membership in a concrete pattern of social relations, rather than simply as a category in which membership is ascribed. This means the vulnerability of young people to influences on their educational attainment may depend on the extent to which an ethnic culture, understood as a pattern of relationships within an ethnic group, exposes them to these influences.

On this note, Portes and Zhou (1993) have suggested that it may be beneficial for the children of immigrants to avoid immediate assimilation into the larger American society. Being part of an immigrant group, according to this argument, insulates children from social problems, such as economic inequality or rapidly changing family structures, that affect the surrounding society. Thus, Gibson (1989) found that the outstanding performance of Punjabi children in a relatively poor rural area of California was a result of parental pressure on children to adhere to the cultures of their own immigrant families and to avoid excessive Americanization. Matute-Bianchi (1986) found that Mexican American high school students who identified strongly with their Mexican heritage tended to do better in school than those who assimilated into Mexican American youth culture.

With regard to Vietnamese young people, in particular, Bankston (1995a, 1996) has found that strong identification with a Vietnamese ethnic community helped adolescents in a low-income neighborhood avoid substance abuse and achieve high levels of school performance. Bankston and Zhou (forthcoming) found that the Vietnamese community promoted the adaptation of young people by steering them away from association with local minority youth.

From this perspective, we might see low Vietnamese dropout rates not as a result of individual characteristics of Vietnamese families, but as a result of the fact that Vietnamese ethnicity acts an alternative culture, an alternative set of social relations, that protects young people from disadvantages in the larger society. If this is true, then we should expect,
first, that the impact of Vietnamese ethnicity on high school dropout rates is not a result of individual family economic situation or of individual family structure. Second, we should expect that Vietnamese ethnicity lowers dropout rates the most where the disadvantages seem to be the greatest: in low income families and in single-parent families.

DATA AND METHODS

The data in this study are taken from the 5 percent Public Use Microdata Samples (PUMS) of the 1990 U.S. Census (U.S. Bureau of the Census 1992a). This is a random 5 percent sample of all persons and housing units in the United States. It offers more information than the full Census, and it provides individual level data, rather than the aggregate-level data offered by the full Census (U.S. Bureau of the Census 1992b).

The study seeks to consider why Vietnamese have lower high school dropout rates than either of the two major racial groups in the United States, whites and blacks. In order to do this, I first present characteristics of Vietnamese, white, and black youth aged 16 to 19, from the PUMS data. I suggest some of the possible reasons for differences in black, white, and Vietnamese dropout rates that are consistent with the empirical characteristics of the three groups.

Following the literature discussed above, I then focus on how family structure and household income, the two primary influences on dropping out of school identified by most researchers, are related to the probability of being a high school dropout for each of the three groups. Specifically, I address the following questions: Can low Vietnamese dropout rates be explained by family structure or household economic situation? If these dropout rates cannot be explained by family structure or household economic situation, is being Vietnamese most strongly associated with low dropout rates in the types of family structure and economic situation generally considered disadvantaged, that is, in single-parent and low-income families?

ANALYSIS

Table 1 presents selected characteristics of white, black, and Vietnamese American non-householders aged 16 through 19, taken from the 5 percent Public Use Microdata Samples (PUMS) of the 1990 U.S. Census (U.S. Bureau of the Census 1992a).

Since it is not possible to use Census data to examine parental or guardian characteristics of young people who have left home and set up their own households, I have selected only those not listed as householders or as spouses of householders. This has resulted in the proportions of high school dropouts, for all three groups, being slightly lower than those found in the full Census, but the trend remains the same: only 6 percent of Vietnamese aged 16-19 who are not householders are neither in school nor high school graduates, compared to 9 percent of white non-householders of the same age and 11 percent of black non-householders of the same age.

Table 1 indicates that all three groups show low rates of marriage at these ages. Statistics on fertility show drastic differences between black females in their late teens and females of the other two groups. Seventeen percent of black teenaged women still living at home have had at least one child, compared to 4 percent of white non-householders of the same age and only 2 percent of Vietnamese teenaged women.

With regard to the parental composition of the household, Vietnamese teenagers resemble whites teenagers much more than they resemble black teenagers in the characteristics cited in this table. Eighty percent of the whites and 73 percent of the Vietnamese live in married couple households, compared to only 46 percent of black teenagers. Black teenagers are also slightly more likely than Vietnamese or whites to live in households in which someone other than a biological parent is head, although whites are the most likely to live in households in which a step-parent is head. Living in households in which a grandparent is head is much more common for black American teenagers (10%) than for either white teenagers (3%) or Vietnamese teenagers (2%). Vietnamese, however, are the most likely to live in households in which siblings are heads of household, probably as a result of the process of immigration for refugees, which often results in parents or other family members being left behind in Vietnam (Bankston 1995b; Kibria 1993; Zhou, Bankston 1994).

Even though the Vietnamese in this PUMS sample have slightly lower rates of living in two-parent families than do the whites, this does not appear to be due to divorce, since Vietnamese teenagers are the least likely of the three groups to be found living with a divorced parent, as shown in Table 1. This.
could, of course, simply imply high rates of remarriage on the part of Vietnamese parents, but it seems more plausible to attribute the slightly lower rates of two-parent families among the Vietnamese to the hardships of the refugee process (Bankston 1995b; Kibria 1993; Rutledge 1992). Not only do black teenagers have the highest rate of living with divorced parents (16%), they also have the highest rate of living with parents who have never been married (11%, compared to 0% for white teenagers and 1% for Vietnamese teenagers, as shown in Table 1).

Given the general similarity between white American teenagers and Vietnamese American teenagers in parental composition of the household, it might be plausible to argue that both of these groups have lower dropout rates than do black Americans because neither have undergone the historical experiences that have affected black families. We might argue that the shattered families of the black American teenagers (reflected in the high rates of black one-parent families shown in Table 1) are the immediate cause of their somewhat higher dropout rates. This argument would be consistent with the literature that I have discussed above. This would still not explain why Vietnamese have lower dropout rates than black Americans because Vietnamese Americans enjoy a slightly more privileged economic situation. Again, however, this would not account for differences between Vietnamese and white Americans, since the Vietnamese are at a definite disadvantage to white Americans in income.

This table also tells us that Vietnamese American teenagers have less educated and older parents than either of the two primary American racial groups. Education of the fathers of Vietnamese teenagers were similar to those of black teenagers: 9.2 years and 9.5 years respectively, compared to 10.7 years for white teenagers. Vietnamese mothers of teenagers were less well-prepared educationally than Vietnamese fathers and they were less well-prepared than mothers of white or black teenagers, since Vietnamese mothers averaged only 7.8 years of schooling. On this note, it must be kept in mind, however, that years of education may be a somewhat misleading indicator of human capital for the Vietnamese, many of whom acquired their education in a foreign setting.

### Table 2: Crosstabulation of Black American and Vietnamese American Dropout Rates, Controlling for Family Structure

<table>
<thead>
<tr>
<th></th>
<th>Black</th>
<th>Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Dropouts in non-married couple families</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dropouts in married couple families</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 3: Crosstabulation of Black American and Vietnamese American Dropout Rates, Controlling for Household Income

<table>
<thead>
<tr>
<th>Percent dropouts in families with incomes</th>
<th>Black</th>
<th>Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $25,000</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>$25,000 - $50,000</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>$50,000 - $75,000</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Over $75,000</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>1462</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>578</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>130</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>11</td>
</tr>
</tbody>
</table>

Part of the income difference between black American families and Vietnamese American might be attributed to the larger families, with greater numbers of workers, of Vietnamese in the U.S. However, even when we look only at individual incomes of heads of households we see a gap between Vietnamese heads of households, who have a median income of $15,367, and black heads of households, who have a median income of $12,000. These differences suggest another possible explanation for the dropout rates of the two groups: One might argue that the Vietnamese have lower dropout rates than black Americans because Vietnamese Americans enjoy a slightly more privileged economic situation. Again, however, this would not account for differences between Vietnamese and white Americans, since the Vietnamese are at a definite disadvantage to white Americans in income.
The fathers and the mothers of the Vietnamese are older than those of the other two groups: Vietnamese fathers, on the average, are about five years older than black fathers and about three years older than white fathers. Vietnamese mothers are about three years older than black mothers and about two years older than white mothers. Thus, it is possible to suggest that the greater maturity of Vietnamese parents could have some influence on lower the high school dropout rates of their children.

In one respect, the Vietnamese are clearly at an apparent disadvantage compared to the major racial groups in the United States: the former are much more recent arrivals and have much more limited skills in English. Only 4 percent of Vietnamese between the ages of 16 and 19 in 1990 were born in the United States, compared to over 95 percent of both black and white Americans. More than one-third of the Vietnamese in this age group arrived in the U.S. after 1980. Only about 58 percent of them could speak English very well, compared to almost all of the two major American racial groups, as shown in this table.

When I say that Vietnamese students have low dropout rates I mean, of course, that their rates are low relative to those of the major groups in our society, which I take as reference points. A preliminary investigation of why Vietnamese students are less likely to drop out of school than the two major groups in American society can begin by focusing on two expected major influences on scholastic success: family structure and income.

Table 2 compares high school dropout rates for Vietnamese Americans aged 16 to 19 in the 1990 Public Use Microdata Sample with a 10 percent random subsample of Black Americans aged 16 to 19 in the 1990 Public Use Microdata Sample. Here I control for whether or not these teenagers live in married couple families. Looking at the first row, it can be seen that Vietnamese American teenagers in 1990 who were not living in married couple families had lower dropout rates than did Black American teenagers. When we look at the comparison of Vietnamese American and Black American teenagers in married couple families, we see that the Vietnamese still have lower dropout rates, but the difference between the two groups has lessened.

If more intact families were a chief reason that the Vietnamese have lower dropout rates than the major American minority group, we would expect to see the differences between the two groups disappear, or at least be greatly lessened, when we control for family structure. Instead, what we see is that differences between racial groups remain, but they are more pronounced among those who live in single-parent families. Among those that are most likely to leave school, those in single-parent families, being Vietnamese makes the greatest difference.

When we look at income categories, in Table 3, we see something very similar happening. The greatest difference in dropout rates between Black American and Vietnamese American teenagers is in the lowest category. As household income increases, the "benefits" of being Vietnamese appear to decrease.

When we look at differences between a 10 percent random subsample of White American teenagers aged 16 to 19 and Vietnamese American teenagers, in Table 4, we see very
much the same pattern.

The Vietnamese are less likely to be dropouts than Whites, whether or not they live in married couple families. But, again, the difference is more pronounced for the non-married couple families. Income shows much the same pattern. Once more, as household income increases, shown in Table 5, the differences between the Vietnamese and the majority group decrease. Neither family structure nor income explains why the Vietnamese have lower dropout rates than most Americans. On the contrary, being Vietnamese appears to be an advantage precisely when a young person is in a type of family associated with high dropout rates or in an income category associated with high dropout rates.

DISCUSSION AND CONCLUSION

Economic inequalities in American society are clearly related to differences in school attainment. The higher the income of a young person's family, the less likely that young person is to leave school before graduating. Family structure, also, is related to school attainment. Young people in one-parent families are more likely to quit school than young people in two-parent families. Both of these statements are true for each of the three racial/ethnic groups examined in this study.

For Vietnamese Americans, however, economic inequality and family structure produce fewer differences than they do for white Americans and black Americans. Vietnamese Americans with low family incomes have dropout rates that are only slightly higher than those of Vietnamese Americans with high family incomes; low income white and black Americans show dropout rates that are much higher than high income whites and blacks. Vietnamese Americans who do not live with two parents show dropout rates only slightly higher than Vietnamese Americans who do live with two parents; white and black Americans who are not in two-parent families show much higher dropout rates than those who are.

The results indicate that the influence of Vietnamese ethnicity on school attainment should be seen as preventive, rather than strictly causal. In other words, Vietnamese ethnicity appears to prevent young people from dropping out of school because of disadvantages related to family economic situation or family structure, the two primary causes of dropping out of school identified by the research literature. Vietnamese ethnicity is most strongly related to lower dropout rates in precisely those categories that young people are most likely to drop out (single parent homes and economically disadvantaged families). This can provide us with a useful perspective on how an immigrant culture can affect possibilities for upward mobility. It is not that Vietnamese Americans possess a "superior" culture that gives them a great advantage over all other Americans. Rather, being a part of a distinctive ethnic culture, an "alternative" culture, appears to insulate them from suffering the ill effects of poverty and single parent families, even when they are themselves poor and in single parent families.

REFERENCES

Acoc A, KJ, Kiecolt 1989 Is it family structure or socioeconomic status? Family structure during adolescence and social adjustment Social Forces 68 553-571
Amor DJ 1992 Why is Black educational achievement rising? Public Interest 108 65-80

Forthcoming. Peer groups and the social adjustment of Vietnamese American adolescents: evidence for a segmented-assimilation approach Social Sciences Qrtly
Bleichman EA 1982 Are children with one parent at psychological risk? An methodological review J Marriage Family 44 179-195
Caplan N, JK Whitmore, MH Choy 1992 Indochinese refugee families and academic achievement Scientific American (February) 266 36-42
Hong Li J, RA Wojtkiewicz 1992 A new look at the effects of family structure on status attainment Social Science Qrtly 73 581-595


McLanahan SA 1985 Family structure and the reproduction of poverty *Amer J Sociology* 90:873-901


Mulkey LM, RL Crain, AJC Harrington 1992 One-parent households and achievement: economic and behavioral explanations of a small effect *Sociology of Education* 60:48-65


Rumberger R 1983 Dropping out of high school: the influence of race, sex, and family background *Amer Educational Res J* 20:199-220


Sandefur GD, SA McLanahan RA Wojtkiewicz 1992 The effect of parental marital status on high school graduation *Social Forces* 71:103-121

Takeuchi DT, DR Williams, RK Adair 1991 Economic stress in the family and children’s emotional and behavioral problems *J Marriage and Family* 53:1031-1041


Wojtkiewicz RA 1993 Duration in parental structures and high school graduation *Sociological Perspectives* 36:393-414

Piercing Social Analysis

You'll find the piercing social analysis that gets beneath the fashion and under the skin.

sociological abstracts

P.O. Box 22206 San Diego, CA 92192-0206
619/695-8803 Fax: 695-0416
Internet socio@cerfnet.com
User Assistance: 800/752-3945

The SAI family of services: Sociological Abstracts (SA) • Social Planning/Policy & Development Abstracts (SOPODA) • sociofile (SA and SOPODA on CD-ROM) • Products are available in print; online from Knight-Ridder, DIMDI, OCLC, and Ovid; on CD-ROM from SilverPlatter, EBSCO and Ovid; on magnetic tape via SAI direct. Document delivery available via SOCIOLOGY *Express: 800/313-9966; 415/259-5013;
Fax 415/259-5058; email: socabs@ebscodoc.com
SURGICAL SPECIALIZATION IN A LIMITED HEALTH CARE PROFESSION:
COUNTERVAILING FORCES SHAPING HEALTH CARE DELIVERY

Neale R. Chumbler, Western Michigan University and
James W. Grimm, Western Kentucky University

ABSTRACT

This study investigated correlates of surgical specialization among a group of non-physician specialists—podiatrists. Placed in the context of a countervailing powers perspective, we investigate one research question not previously examined among a group of limited-health professionals: Is the current work environment of podiatrists (e.g., practice locations, work in a hospital, physician referrals), as compared to their prior education and sociodemographic characteristics, more likely to be associated with surgical specialization? Results show that respondents who practiced in more than one office location, who made referrals to endocrinologists, and who had full medical-staff privileges in a hospital had the greatest likelihood of claiming specialization in surgery. Implications of the findings are discussed in terms of how developments in podiatry are related to a reconfiguration of health care delivery by involving podiatrists increasingly with the traditional work and authority of physicians.

INTRODUCTION

Recent sociology of medicine research has reported on the importance of a new theoretical perspective, that of countervailing powers, in order to better understand professional dynamics that include the interrelationships among established medicine and limited-medical professions (e.g., podiatric medicine) (Abbott 1988; Hafferty, Light 1995; Halpern 1992). The countervailing powers perspective suggests that established medicine is shaped by the particular configuration of countervailing institutional powers, and all within a framework of professional dynamics that includes professional ascension as well as professional maintenance and professional decline. (Hafferty, Light 1995)

Consideration of the countervailing powers perspective has been a redirection of both professional work in cross-profession arenas and jurisdictional control that determines how such cross-profession domains may be changing and delimiting the traditional authority of established medicine (Hafferty, Light 1995; Halpern 1992). From a variety of institutions and groups, countervailing pressures have eroded physicians’ hegemony. These countervailing pressures include, but are not limited to, demographic changes and significant changes in reimbursements for services, managed care arrangements, and the increased role of other health care occupations in treatment networks with physicians (Chumbler, Grimm 1994, 1995; Hafferty, Light 1995).

The term "managed care" is used generically to describe all types of integrated health care delivery systems, such as health maintenance organizations (HMOs) and preferred provider organizations (PPOs), that provide cost-conscious motivations for how and why care is to be delivered (Wirth, Allcorn 1993). In the past, the health care industry operated on a fee-for-service model where patients solicited care on their own, using physicians they wanted. Once selected, the physician was completely autonomous in providing whatever care patients desired (Ferraro 1993; Wirth, Allcorn 1993). Now, HMOs extend contractual responsibility for care to a voluntarily enrolled, defined population in exchange for a fixed annual or monthly fee independent of use of services. (Ferraro 1993)

Under various HMO plans, primary care physicians (physicians who specialize in either family practice, general internal medicine, or general pediatrics) have more power relative to physician specialists, by controlling and monitoring patient referrals to specialists (Wirth, Allcorn 1993; Xu, Veloski, Hojat, Fields 1995). Therefore, in the context of contemporary management of patient referrals, primary care physicians are often called "gatekeepers."

HMOs perform the dual function of being both the insurer and the provider of health care (Ferraro 1993; Wirth, Allcorn 1993). Over 15 percent of the U.S. population (36,482,090) were enrolled in HMOs by July 1991 (Ferraro 1993; MacLeod 1993). This fundamental change—from the traditional fee-for-service care model to the pre-paid group model—has given expanded roles to some health care occupations and also diminished the degree to which physicians dominate the jurisdictional control of health care (Ferraro 1993; Hafferty,