MERTON'S STRAIN THEORY: EVIDENCE FROM THE HIGH SCHOOLS' IN ANKARA∗∗

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Abstract
This study tries to answer the question that to what extent Merton’s strain theory accounts for the juvenile delinquent behaviors (e.g., assault, school delinquency, public disturbance, and miscellaneous minor offenses) of the high school students in various socio-economic contexts (e.g., various districts) in Ankara. By using two-stage stratified cluster sampling, a sample of 1,710 students was drawn from the population of the high school students. A self-administered questionnaire was used to retrieve information from students in 2001. The findings suggest that Merton’s strain theory has no or little explanatory power on assault, school delinquency, public disturbance, and miscellaneous minor offenses.

Key Words
Juvenile Delinquency, Merton’s Strain Theory, Anomie

1. Introduction

1.1 Research Problem
In this study, Merton’s strain theory is applied to the delinquent behaviors of the high school students in various socio-economic contexts in the city of Ankara. Stated more specifically, Merton’s strain theory was tested on the juvenile delinquency in the contexts of low (Mamak, Altındağ, Sincan, Etimesgut), middle (Yeni Mahalle and Keçiören), and high (Çankaya) social standing districts in Ankara in 2001. The research question that the study tried to find a tentative answer is to what extent Merton’s strain theory accounts for the juvenile delinquent behavior of the high school students in Ankara.

The topic of this study is worth studying for several reasons. First, starting with the 1980s, the Turkish society has undergone a change in the value system that puts a premium on monetary success without parallel emphasis on appropriate means. This situation has led to the emergence of white-collar

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Merton’s Strain Theory: Evidence From the High Schools in Ankara

Merton’s Strain Theory has been one of the most important theories in the sociology of deviance and crime. Since its first appearance in 1938, the theory has been continuously scrutinized by the scholars both on theoretical and empirical grounds. On the one hand, some researchers have found support for the theory depending on the nature of measurement (Agnew et al., 1996; Aultman and Welford, 1979; Burton et al., 1992; Cernkovich, 1978a; Datesman et al., 1975; Farnworth and Leiber, 1989; Menard, 1995; Vowell and May, 2000). For example, according to a recent study carried out by Menard...
(1995), when Merton’s anomie theory is specified in a correct way, the theory accounts for 17 and 23 percents of the variation in the frequency of minor delinquency, 8 and 14 percents in index offending, 14 and 34 percents in use of marijuana, and 2 and 18 percents in use of polydrugs. Furthermore, whereas the accounted variance inclines to be least in early adolescence, it is greatest in late adolescence, particularly for use of substances.

On the other hand, some other researchers have not found any support for Merton’s strain theory (Agnew, 1984: Akers and Cochran, 1985: Burton et al., 1992: Burton et al., 1994: Elliott et al., 1985: Hirschi, 1969: Jensen, 1995: Liska, 1971: Paternoster and Triplett, 1988: Simons et al., 1980: Smith and Paternoster, 1987). For example, a recent study conducted by Jensen (1995), using a group of new measures in addition to Farnworth and Leiber’s, does not provide any support for strain theory in relation to juvenile delinquency. Quite the contrary, his data indicate that juveniles who are most apt to take part in juvenile delinquency are the ones who are “the least to lose or the least invested in the future.” Additionally, although it was expected that strain theory accounts better for serious (or official juvenile delinquency) than for less serious (or ordinary) delinquency, this expectation is not supported by Jensen’s study.

In the literature, several measurements of anomie have been carried out in relation to empirical research. Nevertheless, the various operationalizations of the concept inevitably produce confusions. In fact, it is the other way around. Multiple operationalizations can be considered as an origin of aspiration and willingness to examine diverse sides of the same concept (Passas, 1995).

The Discrepancy between Educational Aspiration and Educational Expectation

One common way of testing Merton’s strain theory is to look at the discrepant relationship between educational aspiration and educational expectation in relation to juvenile delinquency. Some studies have found support for the association for the discrepancy between educational aspiration/expectation and juvenile delinquency (Farnworth and Leiber, 1989). For example, while Farnworth and Leiber did not find support for the disjunction in relation to serious utilitarian and serious nonutilitarian delinquency, they found support for the disjunction between educational aspiration and expectation in terms of nonserious types of utilitarian and nonutilitarian delinquency. In other words, some impact of this discrepancy on delinquency was observed.

In contrast, other studies have not endorsed this association (Akers and Cochran, 1985: Hirschi, 1969: Liska, 1971: Paternoster and Triplett, 1988: Smith and Paternoster, 1987). For example, Akers and Cochran (1985) found more or less no support for strain theory concerning juvenile’s use of marijuana in their study.

The Discrepancy between Monetary Aspiration and Educational Expectation

Another way of testing Merton’s strain theory is to examine the discrepancy between economic aspiration and educational expectation in connection with juvenile delinquency. Some studies found support for the theory in terms of this relationship (Farnworth and Leiber, 1989: Quicker, 1974). For example, Farnworth and Leiber found for the disjunctive association between
economic aspiration and educational aspiration in relation with various combinations of serious and nonserious with utilitarian and nonutilitarian types of juvenile delinquency.

Also, Agnew et al. (1996) used a different measurement for the concept of strain (e.g., dissatisfaction or frustration with monetary status) and found a relationship between dissatisfaction with monetary status and income-generating crime and drug use (see for a similar type of measurement of strain Agnew, 1994).

However, in contrast to the findings of Farnworth and Leiber, others have not found the same relationship (Jensen, 1995). For instance, Jensen (1995) found strain that corresponds to the high economic aspiration and low educational expectation was not an important factor in relation to both official and self-reported offenses of varying kinds.

Additionally, Burton et al. (1994) examined adult criminality by using the gap between economic aspiration and expectation and economic aspiration and expectation as a single item and did not find any significant relationship between these variables and adult criminality.

Perceived Blocked Opportunity

Although Merton mentioned the blockage of opportunities in his works, he has not mentioned the concept of “perception of blocked opportunities”. However, researchers have measured strain as perception of blocked opportunities (Burton et al., 1994).

The third way of testing Merton’s theory, as well as other strain theories, is to focus on the relations between perceived blocked opportunities and juvenile delinquency. Some researchers have not found support for Merton’s strain theory in terms of perceived blocked opportunity (Agnew, 1984; Burton et al., 1994; Cernkovich, 1978b; Simons et al., 1980). For example, Burton et al.’s study (1994) revealed that perceived blocked opportunity did not have any impact on any type of adult criminal conducts (e.g., self-administered crime, assaultive conduct, utilitarian and nonutilitarian behavior).

Still, some others have found support for perception of blocked opportunity (Aultman and Wellford, 1979; Baron and Hartnagel, 1997; Cernkovich, 1978a; Cernkovich and Giordano, 1979a; Datesman et al., 1975; Elliott, 1962; Landis and Scarpitti, 1965; Segrave and Hastad, 1983; Short, Rivera, and Tennyson, 1965; Vowell and May, 2000). For instance, Vowell and May (2000) found that perceived blocked opportunity has played a significant role on juvenile violence among African Americans and particularly European Americans.

In short, while some studies have found support for such strain variables as the discrepancy between educational aspiration and educational expectation, the discrepancy between economic (monetary) aspiration and educational expectation, and perception of blocked opportunity in relation to juvenile delinquency, some other studies have not found such a relationship.

The existing studies on the various measures of aspirations and expectations and blockage of opportunities can be criticized in terms of several issues: First, all of the studies reviewed have concentrated only on a western society (e.g., U.S.A.). There has not been any study that focuses on a society
characterized by Islam, secularism, and capitalism (e.g., Turkey) by using Merton’s strain theory.

Second, in this study, some of the existing studies on juvenile delinquency have focused only on the sample of males. Further, the domain of delinquency research in the west has concentrated mostly on male delinquency (Chesney-Lind and Shelden, 1998). This study tries to overcome this problem by testing the theory on an almost equal number of both males and females.

Finally, several studies reviewed have paid attention only to lower class delinquency. Also, the juvenile delinquency research has traditionally concentrated on the lower class (Chesney-Lind and Shelden, 1998). More importantly, Merton claims that delinquency (or deviance and crime) is more prevalent among the lower class. In this regard, while it is essential to test the theory in the context of the lower class, it is also important to look at the middle and upper class delinquency so as to avoid class bias. So, this study attempts to get rid of this problem by examining delinquency across classes.

In line with Merton’s strain theory, it is hypothesized that the higher the discrepancy between educational aspiration and educational expectation the greater the juvenile delinquency will be, that the higher the discrepancy between economic (e.g., monetary) aspiration and educational expectation is the greater the delinquency will be, and that the higher the perception of blocked opportunity is the greater the delinquency will be.

According to the literature on juvenile delinquency in Turkey, juvenile delinquents come mainly from the lower class (Gökçe, 1971; Uluğtekin, 1991; Saran, 1968; Yavuzer, 1981) and migrants within Turkey (Saran, 1968). For instance, Yavuzer (1981) found that 68.6 percent of the 214 convicted youth’s family income with a mean of 6.6 family members were at the officially determined income level. This finding supports the Merton’s claim that juvenile delinquency mostly occurs at the bottom strata of society.

By using a Mertonian perspective, Saran (1968) claimed that the lower class individuals had experienced adaptation problem concerning city life. He argued that it was probable that they tried to adopt a socio-cultural environment emphasizing values that were different than these migrants’ values. When they were not successful in this process, they turned inward (e.g., experienced isolation). Saran (1968) asserted that because goals presented by the city (or norms that aimed at reaching the goals) were not realized, this led to anomie. While his argument makes sense in terms of the relationship between anomie and juvenile delinquency at theoretical level, this association has not empirically been shown. However, it is the purpose of this study to take this lead and examine whether Merton’s strain theory can account for the juvenile delinquency in Ankara.

The existing studies lack certain common aspects and therefore this study tries to fill these gaps. Among these gaps, first, they have generally been written without taking theories of juvenile delinquency into account. Second, a number of studies have small samples, ranging from 240 to 483. Third, almost all the studies do not use multivariate statistics. That is, they mostly explain the phenomena on a single dimension through using percentages. Finally, the existing studies use official data. This has several shortcomings: First, non-
serious types of juvenile delinquency have been left unstudied. Second, official
statistics tends to overemphasize the juvenile delinquency of the lower class.
Third, by using convicted delinquents, most existing studies repeat the existing
biased knowledge.

This study is an attempt to overcome all these problems in such ways:
First, one of the major theories, Merton’s strain theory, will be tested by using
measures from the literature. Second, the theory will be tested on 1,710 high
school students. Third, several multivariate statistics (e.g., factor analysis,
regression) will be employed. Finally, a different type of data gathering (e.g.,
self-administered survey) that has never been used so far was carried out.

Unlike official data, this data include information on the delinquent
activities of the lower, middle, and upper class youth.

1.2 Methodology

This is a quantitative study that deals with the relationships between
juvenile delinquency and strain or anomie theory.

Data Gathering Instrument

In this study, the data-gathering instrument was a self-administered
questionnaire. It is claimed that survey using self-administered questionnaire
documents offenses that are closer the lower end of the offense severity range.
Therefore, serious offenses will be left out (Gove and Crutchfield, 1982:
Thornberry and Farnworth, 1982). Moreover, the accuracy of self-report survey
can be questionable because of honesty and recall problems (Thornberry and
Farnworth, 1982). In spite of its disadvantages, this technique is useful for the
purpose of this study for several reasons. First, there are some sensitive questions
such as drug or alcohol use, for which a self-administered survey is
indispensable. Responses tend to get biased if other techniques such as face-to-
face interview were used. Second, self-administered questionnaire eliminates
interview bias.

Sample and Data

Given the size of the population (N= 148,000), the sample size needed
for the study is calculated as 1067 assuming that the random sample is drawn.
However, due to employment of stratified sample and desire to be on the safer
side, the sample size is increased to 1700. The number of students participated in
the study is 1730 which is 30 more than the calculated due to the existence of
some larger classrooms. 20 students were excluded for various reasons such as
delay to respond to the questionnaire and incomplete and dishonest responses.
Eventually, the data were gathered from 1,710 high school students in the city of

Two-stage stratified cluster sampling was employed in order to obtain a
sample of high school students. At first stage, the subdistricts within the
boundaries of the Greater Ankara Municipality were stratified by their socio-
economic status.

At the second stage, the high schools within each subdistrict were
classified into four groups as state (classic), private, occupational, and Anatolian
high schools. The data for the type of schools and the number of students in each
school were obtained from the Ministry of National Education.

By using probability proportionate to size design (PPS), sample size
needed for each type of school was calculated for each district. Taking the
average size of the class as 40, the number of classes needed is calculated for each type of
school within each district. Selection of schools is done randomly for each type of school
within districts. Final selection of the classrooms was done during the fieldwork at each
school. Attention is paid to get the desired number of students from each type of school.

Districts included in this study in Ankara are these: Çankaya, Yeni Mahalle, Keçiören, Altındağ, Etimesgut, Mamak, and Sincan. Gölbaşı is excluded from the study
due to its distance from the center. Çankaya is considered as high social standing district;
Yeni Mahalle and Keçiören correspond to middle social standing districts; and finally,
Altındağ, Etimesgut, Mamak, and Sincan are included in lower social standing districts. In
the study, strain variables were tested in the context of districts. The major reason for this
is that using district is more objective than using income categories. While individuals can
misinform concerning their incomes, they can not do this in terms of districts. Also,
because of space limitation, this study used, at least, one of the contexts (districts) in this
study.

Students are informed about the confidential and voluntary nature of the
questionnaires.

Of the 1,710 high school students aged 13 to 20, 32.8 percent resided in low,
40.3 percent in middle, and 26.9 percent in high social standing districts. However, the
students at some schools in Çankaya (e.g. due to the sampling of occupational and state
high schools in this district) were not really upper class students. Hence, the findings
concerning this district would be problematic and should be evaluated with care. Also, of
the 1705 students, 48.2 percent were male, and 51.5 percent were female. Additionally,
while the median income is 400 million, the mean income is 633 million Turkish liras. At
the time of administering this survey, the state-defined minimum wage was about 120
million Turkish liras, and 1 dollar was equal to 1.169.000 Turkish liras.

Measurement

Dependent Variables

The latent dependent variable in this study includes twenty one items probing
various juvenile delinquent acts. All items but one (e.g., use of “bali”) in the questionnaire
are obtained from the studies of Brown (1985), Cernkovich and Giordano (1979b), Elliott
and Ageaton (1980), Heimer and Matsueda (1994), Jenkins (1995), Lagrange and
Silverman (1999).

By employing factor analysis, the twenty-one items are reduced to four scales:
assault, school delinquency, public disturbance, and miscellaneous minor offenses.
Assault scale (alpha = .83) includes eight items: hitting other students, attacking someone,
using force on students, fist fighting, carrying knife, bat, being involved in gang fights,
sexual harassment, using force on teachers.

School delinquency scale (alpha = .75) involves five items: school truancy,
smoking cigarettes, using alcohol, cheating on exams, being late for class.

Public disturbance scale (alpha = .69) covers four items: throwing things out of
a moving car, purposely damaging lawns and trees, being loud, rowdy or unruly in a
public place, damaging school properties.

Miscellaneous minor offenses scale (alpha = .45) includes four items: stealing
from teachers or students, use of “bali,” running away from home, and gambling.

As mentioned before, although stealing as an economic or utilitarian crime
should have been added into this study, at least according to Merton’s own claim (Merton
1968), the pilot study carried out for this study showed that stealing was not “common”
among students. Therefore, the current study did not include this variable in the study
even though it was a major deficiency.

Independent Variables

In this study, three main independent variables are used. The first one is the
discrepancy between educational aspiration and educational expectation. The second is
the discrepancy between economic aspiration and educational expectation. The third is perception of blockage of opportunity.

The gap between educational aspiration and education expectation is calculated in this way: Educational expectation is subtracted from educational aspiration. As for the gap between monetary aspiration and educational expectation, because the response items of economic aspiration has five items that is one item more than educational expectation which has four response items, the five response items of economic aspiration are multiplied by four, and four items of educational expectation are multiplied by five in order to have the same metric (personal communication with Mick Couper). The questions for aspirations and expectations come from Farnworth and Leiber’s study (1989).

The questions for the third measure, perceived blocked opportunity, include the respondents’ self-evaluation of blocked opportunities on education, job, and law. For the ease of interpretation, high scores indicated greater level of perceived blocked opportunity. These questions are gathered from Vowell and May’s study (2000). Furthermore, such control variables as age and gender are used in this study.

2. Findings of the Study

In this section, the test of Merton’s strain theory is carried out by using hierarchical regression technique. In this technique, variables are introduced to the equation in blocks.

Low Social Standing Districts: Mamak, Altındağ, Sincan, and Etimesgut

**Assault:** Independent of age and gender (e.g., female), the only significant strain variable is the discrepancy between economic (e.g., monetary) aspiration and educational expectation that has a positive impact on assault. This means that as the gap between monetary aspiration and educational expectation increases, high school students’ assault increases, too. The strain variable(s) accounts for 3 percent of the variation in assault. Also, such control variables as age and gender are statistically significant. While age is associated positively with assault, gender is associated negatively with it. That is, as age increases, so does assault. Compared to males, females are less likely to commit assault. The explained variance by the control variables is 13 percent. Gender has the highest impact on assault (see Table 1).

**School Delinquency:** Net of the control variables, the discrepancy between monetary aspiration and educational expectation is the sole significant strain variable that has a positive effect on school delinquency. The strain variable accounts for 2 percent of the variance in the dependent variable. Furthermore, age and gender are significant. As before, whereas age is related positively with school delinquency, gender is inversely related. The accounted variance by the control variables is 10 percent. Among the predictors, age has the greatest effect on assault.

**Public Disturbance:** When age and gender held constant, the only significant strain variable is perception of blocked opportunity that has a positive effect on public disturbance. That is, as perception of blocked opportunity increases, public disturbance of high school students increases, too. The accounted variance by the strain variable is 2 percent. Among the control variables, gender is the only significant variable and explains 5 percent of the variance in public disturbance. Gender has the greatest effect on public disturbance.

**Miscellaneous Minor Offenses:** None of the strain variables are statistically significant concerning miscellaneous minor offenses. Age and gender are the only significant variables. These variables explain 3 percent of the variation in the dependent variable.
Table 1: Regression Analysis for Low Social-Standing Districts (Mamak, Altındağ, Sincan, and Etimesgut)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Assault (n=531)</th>
<th>School Delinquency (n=531)</th>
<th>Public Disturbance (n=531)</th>
<th>Miscellaneous Minor Offenses (n=530)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discrepancy between educational aspiration and educational expectation</td>
<td>.075</td>
<td>.087</td>
<td>.050</td>
<td>.255</td>
</tr>
<tr>
<td>Discrepancy between economic aspiration and educational expectation</td>
<td>.169</td>
<td>.000</td>
<td>.141</td>
<td>.001</td>
</tr>
<tr>
<td>Perceived blocked opportunity</td>
<td>.030</td>
<td>.494</td>
<td>.050</td>
<td>.247</td>
</tr>
<tr>
<td>R-Square</td>
<td>.032</td>
<td>R-Square</td>
<td>.024</td>
<td>R-Square</td>
</tr>
<tr>
<td>F</td>
<td>.001</td>
<td>F</td>
<td>.006</td>
<td>F</td>
</tr>
<tr>
<td>Discrepancy between educational aspiration and educational expectation</td>
<td>.077</td>
<td>.060</td>
<td>.053</td>
<td>.203</td>
</tr>
<tr>
<td>Discrepancy between economic aspiration and educational expectation</td>
<td>.137</td>
<td>.001</td>
<td>.121</td>
<td>.004</td>
</tr>
<tr>
<td>Perceived blocked opportunity</td>
<td>.030</td>
<td>.452</td>
<td>.045</td>
<td>.275</td>
</tr>
<tr>
<td>Age</td>
<td>.112</td>
<td>.006</td>
<td>.235</td>
<td>.000</td>
</tr>
<tr>
<td>Gender (=female)</td>
<td>-.326</td>
<td>.000</td>
<td>-.176</td>
<td>.000</td>
</tr>
<tr>
<td>R-Square</td>
<td>.164</td>
<td>R-Square</td>
<td>.125</td>
<td>R-Square</td>
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<tr>
<td>F</td>
<td>.000</td>
<td>F</td>
<td>.000</td>
<td>F</td>
</tr>
</tbody>
</table>

Sign. stands for significance

Middle Social Standing Districts: Yeni Mahalle and Keçiören

**Assault:** Among the strain variables, the gap between monetary aspiration and educational expectation and perceived blocked opportunity are statistically significant and have positive effect on assault, independent of age and gender. Also, age and gender are statistically significant. As before, although age has a positive effect on assault, gender has a negative effect on it. The accounted variances by the strain and the control variables are 6 and 13 percent, respectively. Gender has the highest effect on assault (see Table 2).

**School Delinquency:** Net of the control variables, the discrepancy between educational aspiration and educational expectation and the discrepancy between monetary aspiration and educational expectation are statistically significant. Both have positive impact on school delinquency. Furthermore, the control variables are statistically significant. Again, whereas age is related positively with school delinquency, gender is related inversely with it. While the strain variables account for 5 percent of the variance, the control variables account for 14 percent of the variance in school delinquency. Age has the highest impact on school delinquency.

**Public Disturbance:** When age and gender are controlled, the discrepancy between monetary aspiration and educational expectation and perception of blocked opportunity are statistically significant. Their signs are in the hypothesized direction according to the strain theory. Both age and gender are not statistically significant. The
gap between monetary aspiration and educational expectation has the highest effect on public disturbance. The explained variance by the strain variables is 4 percent.

Miscellaneous Minor Offenses: Net of the control variables, the discrepancy between economic aspiration and educational expectation is statistically significant and has positive impact on various minor offenses. Moreover, the only significant control variable is gender and has negative impact on the dependent variable. Gender has the greatest impact on minor offenses. The strain and control variables account for similar amount of the variance in miscellaneous minor offenses (e.g., 3 percent).

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Assault</th>
<th>School Delinquency</th>
<th>Public Disturbance</th>
<th>Miscellaneous Minor Offenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>eta</td>
<td>ign.</td>
<td>eta</td>
<td>ign.</td>
<td>eta</td>
</tr>
<tr>
<td>Discrepancy between educational aspiration and educational expectation</td>
<td>033 391</td>
<td>094 016</td>
<td>068 084</td>
<td>016 680</td>
</tr>
<tr>
<td>Discrepancy between economic aspiration and educational expectation</td>
<td>159 000</td>
<td>166 000</td>
<td>150 000</td>
<td>148 000</td>
</tr>
<tr>
<td>Perceived blocked opportunity</td>
<td>149 000</td>
<td>085 030</td>
<td>088 026</td>
<td>058 140</td>
</tr>
<tr>
<td>R-Square</td>
<td>.05</td>
<td>R-Square</td>
<td>.045</td>
<td>R-Square</td>
</tr>
<tr>
<td>F</td>
<td>.00</td>
<td>F</td>
<td>.000</td>
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<td>Discrepancy between educational aspiration and educational expectation</td>
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<td>093 010</td>
<td>068 084</td>
<td>017 667</td>
</tr>
<tr>
<td>Discrepancy between economic aspiration and educational expectation</td>
<td>138 000</td>
<td>138 000</td>
<td>145 000</td>
<td>137 001</td>
</tr>
<tr>
<td>Perceived blocked opportunity</td>
<td>122 001</td>
<td>044 226</td>
<td>080 043</td>
<td>044 258</td>
</tr>
<tr>
<td>Age</td>
<td>120 001</td>
<td>317 000</td>
<td>048 226</td>
<td>062 117</td>
</tr>
<tr>
<td>Gender (=female)</td>
<td>.313 000</td>
<td>.163 000</td>
<td>.051 193</td>
<td>.166 000</td>
</tr>
<tr>
<td>R-Square</td>
<td>.182</td>
<td>R-Square</td>
<td>.189</td>
<td>R-Square</td>
</tr>
<tr>
<td>F</td>
<td>.000</td>
<td>F</td>
<td>.000</td>
<td>F</td>
</tr>
</tbody>
</table>

Sign. stands for significance

High Social Standing District: Çankaya
**Assault:** When age and gender held constant, perception of blocked opportunity is the only significant strain variable that has a positive effect on assault. Furthermore, age and gender are statistically significant. While age has a positive impact on assault, gender has a negative impact on it. The model with the strain variables accounts for 5 percent of the variation in assault. As for the control variables, they explain 7 percent of the variance in the dependent variable. Gender has the greatest influence on assault (see Table 3).

**School Delinquency:** The gap between monetary aspiration and educational expectation and perceived blocked opportunity are the only significant strain variables, net of the control variables. Also, they are related positively with school delinquency. Furthermore, age is the sole significant control variable with a positive effect on school delinquency. The above strain variables explain 4 percent of the variance in the dependent variable. The control variable explains 8 percent. Age has the highest impact on school delinquency.

**Public Disturbance:** The gap between monetary aspiration and educational expectation is the only significant strain variable and associated positively with public disturbance, independent of age and gender. Also, age is the sole significant control variable and related positively with public disturbance. While the strain variable explains 4 percent, the control variable explains 2 percent of the variation in public disturbance. Age has the greatest effect on public disturbance.

**Miscellaneous Minor Offenses:** None of the three strain variables are statistically significant. The only significant variable is age, which has positive impact on miscellaneous minor offenses. Age explains 3 percent of the variance in the dependent variable.

In short, the strain theory’s explanatory power ranges from none to 6 percent. This means that the theory has little explanatory power. Furthermore, age and gender (e.g., the control variables) explain more variation in assault and school delinquency than the strain variables. However, the control and strain variables explain more or less similar portion of the variance in public disturbance and miscellaneous minor offenses. Yet, the explained variances in these dependent variables by both of them are very low.
Table 3: Regression Analysis for High Social-Standing District (Çankaya)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Assault (n=428)</th>
<th>School Delinquency (n=428)</th>
<th>Public Disturbance (n=428)</th>
<th>Miscellaneous Minor Offenses (n=427)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discrepancy between educational aspiration and educational expectation</td>
<td>-.015</td>
<td>.752</td>
<td>.006</td>
<td>.908</td>
</tr>
<tr>
<td>Discrepancy between economic aspiration and educational expectation</td>
<td>.095</td>
<td>.054</td>
<td>.141</td>
<td>.004</td>
</tr>
<tr>
<td>Perceived blocked opportunity</td>
<td>.172</td>
<td>.001</td>
<td>.118</td>
<td>.017</td>
</tr>
</tbody>
</table>

R-Square .046  R-Square .041  R-Square .037  R-Square .014

F .000  F .000  F .001  F .116

Discrepancy between educational aspiration and educational expectation | -.006 | .903 | .000 | .839 | -.009 | .856 | .007 | .889 |
| Discrepancy between economic aspiration and educational expectation | .089 | .061 | .125 | .008 | .138 | .005 | .090 | .067 |
| Perceived blocked opportunity | .175 | .000 | .117 | .013 | .092 | .059 | .046 | .352 |
| Age | .159 | .001 | .283 | .000 | .154 | .001 | .170 | .000 |
| Gender (=female) | -.235 | .000 | -.038 | .415 | .013 | .783 | -.079 | .104 |

R-Square .113  R-Square .119  R-Square .061  R-Square .044

F .000  F .000  F .000  F .002

Sign. stands for significance

3. CONCLUSION

The above findings suggest that Merton’s strain theory has no or little explanatory power on assault, school delinquency, public disturbance, and miscellaneous minor offenses in various socio-economic contexts (e.g., low, middle, and high districts) in the case of Ankara. The size of explained variance by the strain theory in these juvenile delinquent acts varies from 1 (non-significant) to 6 percent, which are very low. In this regard, the findings of this study support the findings of the previous studies that have not found support for Merton’s version of the strain theory (Agniew, 1984: Akers and Cochran, 1985: Burton et al., 1992: Burton et al., 1994: Elliott et al., 1985: Hirschi, 1969: Jensen, 1995: Liska, 1971: Paternoster and Triplett, 1988: Simons et al., 1980: Smith and Paternoster, 1987). Two major findings of this study create puzzle for the strain theory: First of all, strain does not appear to be concentrated in the lower class due to the low explained variance. In fact, this is also true for the middle and upper classes. Second, a model with only age and gender appears to be explaining more variation in juvenile delinquent acts than the strain theory, at least, for assault and school delinquency. In spite of the above puzzles, the gap between educational aspiration and educational expectation, the gap between monetary aspiration and educational expectation, and perception of blocked opportunity are in the hypothesized direction: An increase in these strain variables are related positively to various juvenile delinquent acts.
The above findings can be interpreted in the following ways: First, the lack of support for the theory can be attributed to the fact that the high school students in this study and in general have already had economic and educational opportunities. If the family incomes of these students were not sufficient enough, the high school students would not be at schools. What this says is that these high school students are less strained. Therefore, having monetary and educational opportunities can be the reason for the lack of support for the strain theory. Furthermore, studies that use high school students do not usually find support for the strain theory (Agnew, 1991). For this reason, when strain theory is tested, the test should be conducted on street youths and/or the hard-core poor in gecekondus. In this way, the theory can have more explanatory power due to the fact that these street youths or the poor in gecekondus have been more exposed to economic, educational, social deprivation than the youths in schools (see Agnew, 1991 for a similar point).

Second, it is claimed that the youth can have a variety of goals, and goal commitment can be viewed as variable not as constant (Agnew, 1984). In our case, monetary and educational goals may not be the only goals the high school students pursue. That is to say, some other goals may create more strain than what this study has considered as strain-generating variables (e.g., monetary and educational discrepancies or gaps). Similarly, such “immediate goals” as having good grades, being popular among friends, doing well in sports and so on can be more important than “future goals,” for example monetary aspiration in this study (see Agnew 1984 for this point). In line with this reasoning, the finding that the discrepancy between educational aspiration and educational expectation is positively associated with juvenile delinquency appears to be an immediate goal for the high school students. Therefore, this may be a strain-producing factor.

Third, as Merton (1968) mentioned, his theory does not explain non-utilitarian types of behavior among juveniles. In this study, such dependent variables as assault, school delinquency, public disturbance, and miscellaneous minor offenses are not utilitarian in nature. So, the dependent variables in this study did not really represent utilitarian types of delinquent behavior, for instance, theft, robbery, and so on. Additionally, Merton (1968) claimed that some counterbalancing forces can be at work, and strain-generating situations do not usually create deviant behavior. In a study conducted by Özbay and Özcan (2002), it is found that the high school students’ bond to conventional society is a very important factor that prevents the students from committing assault, school delinquency, public disturbance, and miscellaneous minor offenses.

Fourth, Merton (1964) asserted that individuals could reduce their aspirations. In this way, they can be less affected by strain. Family, religion, and fate have an important place among the values of the adult population in Turkey. These existing value systems may decrease the aspirations of the youth in some ways. For example, the youth can get emotional, monetary support from their families. In this way, they can reduce their strain and their aspirations. Also, believing in fate or religion can make the youth less stressful. Additionally, the Turkish society has been under the influence of economic and political chaos. This may lead to the view that many youths or individuals have been in bad
situations (e.g., not entering into university, unemployment, low income) and
they realize that there are others who share the same fate. Hence, the general
collection of the society may reduce one’s high aspiration.

Among the strain variables, the finding that the discrepancy between
monetary aspiration and educational expectation is associated positively with
juvenile delinquency suggests that the values of the Turkish youth (especially the
notion of “cutting corners”) appear to lead to juvenile delinquency. Also, this is
the most consistent strain variable. The discrepancy between monetary aspiration
and educational expectation inclines to cause assault in low and middle social
standing districts, school delinquency in low, middle, and high social standing
districts, public disturbance in middle and high social standing districts, and
minor offenses in middle social standing district. This shows that the discrepancy
between monetary aspiration and educational expectation plays more important
role in the context of middle social standing district.

Perception of blocked opportunity is the second consistent strain
variable in this study. This seems to suggest that some high school students
perceive economic and educational inequalities that exist at the macro level in
the Turkish society. Then, this perception of blocked opportunity tends to lead to
such delinquent acts as public disturbance in low and middle social standing
districts, assault in middle and high social standing districts, and school
delinquency in high social standing district. On the basis of this knowledge, it is
hard to say that perception of blocked opportunity works better for one district
than other. Interestingly, perception of blocked opportunity does not have any
impact on minor offenses in none of the districts.

Although the educational aspiration and education expectation is
positively related to juvenile delinquency, this association did not get much
support. This variable tends to lead to school delinquency in only middle social
standing district. This seems to suggest that middle class individuals value
education more than lower and upper class individuals. Hence, this may result in
educational strain for only middle class adolescents.

Overall, strain variables are more significant in the context of middle
social standing district than in the contexts of lower and upper social standing
districts. However, when the variance explained by the strain variables in the
three contexts are taken into consideration, it is difficult to argue that strain
variables are stronger in one context than other.

Being female is associated inversely with assault, school delinquency,
public disturbance, and miscellaneous minor offenses. There may be a variety of
reasons for the lesser involvement of the high school girls, compared to males.
One possible reason can be differences in socialization between males and
females. Traditionally, females are expected to be quite, docile, non-violent, and
so on. Males are supposed to be active, self-assertive, masculine, and so on. In
other words, while females are expected to have feminine features, males are
expected to have masculine features. Another possible reason that is related to
the first one is that whereas female delinquency can not be tolerated, male
delinquency can be tolerated by school authorities and families. As for age, this
variable is positively related to assault, school delinquency, public disturbance,
and miscellaneous minor offenses. The possible reasons for this association can
be biological maturation, desire for independence, rebelliousness, and so on.
Both of these variables are more consistent than the above strain variables across the four types of delinquent acts.

This study has some deficiencies: First, in line with self-reported studies in general, such dependent variables as assault, school delinquency, public disturbance, and miscellaneous minor offenses are known as nonserious offenses, compared to, say, juvenile homicide.

Second, some of the schools in the high social standing district (e.g., Çankaya) did not really represent this district. This may contaminate the findings in this study.

Future studies should concentrate on utilitarian and more serious offenses in terms of testing Merton’s strain theory. Also, the theory should be tested on street youths or the hard-core poor in slums. Moreover, such constructs as relative and absolute deprivation should be incorporated into the analysis. Also, occupational aspiration and expectation should be used in testing of the theory. Finally, some other strain-generating factors in the context of Turkey should be identified and included in testing the theory.

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