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Institutional Anomie Theory: Does Market Mentality Mediate Normative Flexibility?

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Abstract

Institutional Anomie Theory argues instrumental crime and violence are a result of weakened social controls that are caused by an imbalance of values favoring the economy. Anomie causes a new moral standard to emerge, one that encourages normative flexibility to achieve goals. The emphasis on the economy permeates into noneconomic institutions that cause them to adopt economic principles and weakens them. The result of this process is that individuals may develop market mentality. Past research has considered normative flexibility to be embedded within market mentality. However, this assumption has not been formally tested. The concepts may be theoretically distinct and empirically distinct. A formal test of this assumption would provide a better understanding of how market mentality relates to deviance and crime. The current study tests if market mentality mediates the relationship between normative flexibility and delinquency using a sample of 2,748 adolescents from thirty-one schools across the U.S. A factor analysis found normative flexibility and market mentality are distinct theoretical concepts. A multiple regression found normative flexibility is a significant predictor of market mentality. A series of negative binomial regressions did not find evidence that market mentality mediates neutralization, property crimes, and violent crimes. Future research should regard market mentality and normative flexibility as distinct concepts and they should not be lumped together.

Institutional Anomie Theory: Does Market Mentality Mediate Normative Flexibility?

Messner and Rosenfeld (1994) proposed Institutional Anomie Theory (IAT) to explain the high rate of violent crime and property crime the U.S. was experiencing in the 1990's. According to the theory, an imbalance of values favoring economic goals weakens non-economic institutions and values, resulting in anomie. Messner and Rosenfeld (1994) state, Anomie is the creation of a new moral standard. This moral standard has its roots in capitalistic values and encourages "normative flexibility in the pursuit of dominant cultural goals" (Messner and Rosenfeld, 1994, p. 62). Therefore, engaging in morally questionable acts is acceptable if the purpose is to increase wealth. Furthermore, the emphasis on capitalistic values, takes precedence over non-economic values such as solidarity, social support, and benevolence, causing a person to adopt market values (Hövermann, Grob, and Messner, 2015).

While Messner and Rosenfeld (1994) state normative flexibility is utilized to achieve dominant cultural goals, this component has not been examined as a distinct theoretical concept in the IAT literature. Instead, past research has assumed normative flexibility is embedded within market mentality. This is because it is assumed that as individuals adopt market mentality their boundaries of acceptable actions and behaviors that can be justified are simultaneously expanded (Hövermann & Messner, 2019). Rather than normative flexibility being embedded within market mentality, it is reasonable to suspect that they are distinct theoretical processes. If this were the case, then a weakening of social controls i.e. social constraints would expand the boundaries of potential actions for individuals, freeing them to develop normative flexibility. The development of normative flexibility may then lead individuals to justify adopting market values over

traditional solidarity values thereby leading to a market mentality mindset. In other words, the adoption of normative flexibility would be a prerequisite to adopting market mentality. Because of this, it is likely normative flexibility and market mentality are empirically distinct as well as theoretically distinct. If this is the case, market mentality would be a mediating variable between normative flexibility and property crimes and violent crimes.

The purpose of this paper is to test if normative flexibility and market mentality are distinct theoretical concepts. If the concepts are distinct this paper will test if market mentality mediates normative flexibility and leads to increases in property crime, fighting, and violent crime for adolescents. To accomplish this, first, the literature on IAT is reviewed. Second, this paper argues the processes of justification that occurs with normative flexibility are actually Sykes and Matza's (1957) techniques of neutralization. Therefore, this paper argues IAT and Matza's (1964) techniques of neutralization are compatible, and neutralization theory can be used to explain the process through which individuals develop market mentality. Third, using wave six of the Gang Resistance Education And Training (G.R.E.A.T.) data, a factor analysis is performed to determine if normative flexibility is distinct from market mentality. In addition twelve negative binomial regression models are run to determine if market mentality mediates normative flexibility, which, then leads to adolescent property crime, fighting, and violent crime.

A Review of the Institutional Anomie Theory Literature

IAT was originally formulated as a macro-level theory centered on Durkheim's (1897/1951) second conceptualization of anomie, and has traditionally been tested by comparing crime rates of different countries (Chamlin and Cochran, 1995; Messner and Rosenfeld, 1997; Savolainen, 2000). According to Durkheim (1897/1951) anomie occurs

“when society is disturbed by some painful crisis or by beneficent but abrupt transitions” weakening the moral regulating force in society. As a result, people begin aspiring towards individualistic goals, which creates additional stress on the remaining regulating forces of society (Durkheim, 1897/1951). IAT assumes rapid occurring historical events within the United States such as the Great Depression, rapid technological innovations, WWII, and the prosperity of the 1950’s through 1970’s resulted in anomie and lead to a breakdown of the traditional moral order. As a result, people began to aspire toward capitalistic goals that created a new moral standard rooted in capitalistic values. As a result, countries with a high level of anomie will have high levels of property and violent crime, whereas countries with low levels of anomie will have low levels of property and violent crime.

However, research has expanded the scope of IAT to the individual level. For example, Messner, Thome, and Rosenfeld (2008) explained that IAT can be measured on the individual level. This is because institutions are made up of concrete individual actors who “produce and reproduce institutional dynamics that operate at the macro level” (p. 165). Muftić (2006) surveyed undergraduates and found American students placed a higher importance on economic goals than foreign-born students, and were more likely to engage in cheating behaviors. Stults and Falco (2013) examined the effect of high school seniors’ commitment to noneconomic institutions and commitment to economic goals, on violence theft and substance use. Students who were more attached to economic goals were more likely to engage in violence and substance use. This finding indicated that IAT is not limited to examining only violence and property crime, but can also explain various types of adolescent delinquency. Rosenberger (2016) examined if television consumption increases adherence with the American culture and criminal behavior. Following past

research (Chamlin and Cochran, 1997), Rosenberger (2016) used altruistic behavior and debt to measure an individual's attachment to the American dream. It was found that television consumption is associated with increased levels of isolation, criminal behavior, and a decrease in altruism (Rosenberger, 2016).

Hövermann, Groß, and Messner (2015) examined if an institutional imbalance favoring the economy produces anti-social attitudes and behaviors in individuals who hold capitalistic values over pro-social solidarity values in Germany. To test this, the authors characterized individuals who hold capitalistic values as having "marketized mentality." Marketized mentality is characterized when individuals consider personal achievement, utilitarian motives, egotistical individualization, self-interest, competition, insensitivity to means, and a fetishism of money, as moral standards that are emphasized over pro-social solidarity values such as altruism, equal worth, equal treatment of all groups, cooperation, an emphasis on family, friends, and non-economic goals. The authors found a significant negative correlation between market mentality and solidarity. This indicates the degree that market mentality is accepted is inversely related to the degree of solidarity values a person holds. Hövermann, et al., (2015) also found that individuals with market mentality are more likely to hold prejudicial attitudes against groups who are financially disadvantaged. Hövermann, Messner, and Zick (2015) also examined this relationship, and found weakened non-economic institutions are strongly correlated with weakened social relations, weakened political relationships, weakened families, anomia, and marketized mentality. Furthermore, marketized mentality is significantly related to a devaluation of unemployed groups, homelessness, and disabled persons (Hövermann, Messner, and Zick, 2015).

Groß, Hövermann, and Messner (2018) surveyed students across 69 different schools in Germany to test marketized mentality at the student level and if a competitive school culture increases delinquency levels. Market mentality was measured by an egoistic scale which consisted of three questions asking about self-interest, dominating others, and personal success. Solidarity was measured by student responses to questions about altruistic and self-transcending values. The school culture was measured by how competitive students perceived the school to be. The authors found market mentality is associated with increased levels of delinquency, and a competitive school culture is associated with increased levels of violence for students who are underperforming.

Zito (2018) examined the World Values Survey (WVS) to test if IAT impacts the justification to commit crime. Justification to commit crime was measured by examining how justified morally dubious acts are in certain situations. Zito (2018) found that monetary fetishism predicted justification of morally dubious acts cross-nationally. Hövermann and Messner (2019) expanded on Zito (2018) and found in a comparison of countries, that institutional imbalance was associated with market mentality and an increased likelihood of justifying instrumental offenses.

Marketized mentality is the conceptual linchpin that connects institutional anomie theory to the individual level (Groß, Hövermann, and Messner, 2018). It is a latent construct that can be inferred by looking at attitudinal, behavioral, and ideological variables (Hövermann, Groß, and Messner, 2016). However, market mentality is a new concept and standardized scales for its measurement have not yet been developed. As a result, there have been numerous variables measures in various scales. For example, past scales have examined questions asking about individual attitudes regarding success, achievement, power, egotism, individualism, monetary fetishism, market role

performance, self-serving attitudes, moral attitudes, solidarity levels, benevolence, altruism, and universalism. Prior literature has typically examined several of these listed themes (Hövermann, Groß, and Messner, 2015; Hövermann, Messner, and Zick, 2015; Hövermann, Groß, and Messner, 2016; Groß, Hövermann, and Messner, 2018; Hövermann and Messner, 2019).

Furthermore, the concept of normative flexibility is thought to be embedded within market mentality, yet, this assumption has not been tested as normative flexibility has not been formally operationalized at the individual level or measured in the market mentality scales. It is important this is tested as Messner, Thome, and Rosenfeld (2008) clarified the likelihood of criminal acts is greatest in individuals who use morally flexible means to achieve goals. However, all prior studies that have examined the individual level effects of IAT have either examined the amount of time students have been in the U.S. (Muftić, 2006), the level of integration with non-economic institutions (Stults and Falco, 2013), television consumption (Rosenberger, 2016), or the presence of solidarity values versus market values (Hövermann, et al., 2015; Groß, et al., 2018).

The current study helps to overcome a past limitation of varying market mentality questions in the individual level IAT literature. This is accomplished by performing a factor analysis on similar questions that have been used to measure market mentality in the past to identify which are key to the construct. Normative flexibility will also be examined because it is likely normative flexibility is theoretically distinct and empirically distinct from market mentality. This is because anomie weakens non-economic institutions and thus social controls over individual actors. As social controls weaken the boundaries of acceptable behaviors are expanded. Because of this, previous actions that were not thinkable for individual actors can be justified. For example, individuals can

justify prioritizing self-advancement over the family and friends, thereby leading to a market mentality mindset. Therefore, normative flexibility may be used to explain the process through which market mentality is adopted. Once market mentality is adopted and embraced, the individual is no longer restrained by solidarity values or feelings of benevolence. As a side effect, individuals are free to commit property crime and violence without concern for others.

Techniques of Neutralization

As mentioned earlier, the IAT literature has not examined how normative flexibility and market mentality relate to one another. It is important the relationship is understood as it may provide a clearer understanding of how market mentality leads to increased levels of crime. Normative flexibility has not been formally operationalized in the IAT literature. Hövermann & Messner, (2019) describe normative flexibility as a process of stretching the boundaries that of acts that can be justified. Yet, this description is not novel because neutralization theory already explains how justifications relate to criminal outcomes. Because of this, Messner and Rosenfeld's (1994) concept of normative flexibility is synonymous with Sykes and Matza's (1957) techniques of neutralization. It is theoretically appropriate to utilize neutralization theory in IAT as Matza (1964) states, drift theory falls under the paradigm of control theories making both theories compatible. If normative flexibility and neutralization were not the same theoretical concept, one would have to explain how normative flexibility lead to criminal outcomes without describing a process of justifications or neutralizations. Because the ideas are theoretically synonymous, techniques of neutralization should be used to explain less developed concepts of other control theories such as normative flexibility in Institutional Anomie Theory.

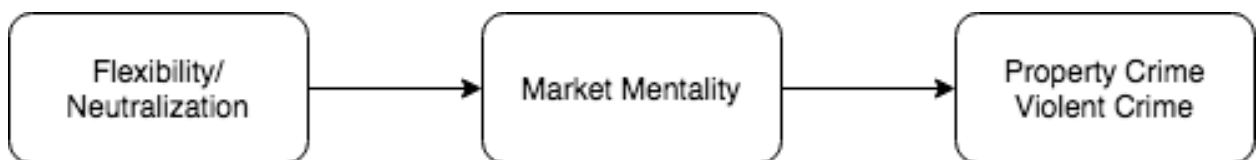
Sykes and Matza (1957) proposed neutralization theory an alternative to sub-cultural theories of delinquency (Murray and Topalli, 2014). According to Sykes and Matza (1957) techniques of neutralization include a denial of responsibility, denial of injury, denial of a victim, condemnation of the condemners, and appeal to higher loyalties. According to the theory, these techniques are learned and used to neutralize existing social controls, enabling the user to drift in and out of delinquency. Furthermore, these techniques are only brief shields to the dominant normative system, and do not result in “the creation of an opposing ideology” (Sykes and Matza (1957, p. 669). Furthermore, Sykes and Matza (1957) explain that because juveniles still experience guilt, it is evidence that the techniques of neutralization only weaken the existing social controls; they do not completely neutralize the normative order.

An important difference between drift theory and IAT, is that drift assumes the techniques of neutralization are first learned, and then used to weaken social controls allowing individuals to engage in deviance. IAT assumes social controls are already weakened because of economic values penetrating non-economic institutions and weakening them (Messner and Rosenfeld, 1994). The two theories have different explanations for how neutralizations develop and how criminal acts occur, making them appear independent from one another. However, the two theories are compatible if Sykes and Matza’s (1957) proposition that the technique of neutralizations are learned, is expanded on with the following statement. Techniques of neutralization develop through a process of weakening of social controls that expands the boundaries of actions susceptible to neutralization. This proposition allows the techniques of neutralization to fit within IAT in a parsimonious manner. This is because IAT is built on the idea that anomie results in the creation of a competing moral standard in society that encourages

normative flexibility. It follows that anomie weakens the social constraints of noneconomic institutions causing individuals to develop techniques of neutralization/normative flexibility. This allows individuals to neutralize personal attachments and adopt the anomic moral standard of market values.

Because of this, in a marketized society, it appears that Matza's (1964) techniques of neutralization create a natural pathway that allows individuals to develop market mentality. In short, the anomic moral standard of market values permeating non-economic institutions and weakening them, in combination with techniques of neutralization, allow individuals to adopt a new ideological view that is market mentality. Therefore, flexibility is an important variable that needs to be tested in IAT models, as it would potentially explain how market values and market mentality can lead to deviance on an individual level. This paper attempts to fill this gap in the literature by examining if neutralization mediates the relationship between market mentality and delinquency. The Hypothesis states:

H1: Market Mentality mediates the relationship between Normative Flexibility and property crime and violent crime.



Methods

Data

This study will utilize wave six of the Gang Resistance Education And Training (G.R.E.A.T.) data. G.R.E.A.T. is a primary prevention program aimed at preventing youth from becoming involved in gang and delinquent activities. The program was

originally developed in 1991 by law enforcement in Phoenix Arizona to reduce the number of adolescents who were becoming involved in gangs. The program involved middle school students, parents, and law enforcement. Because of its positive reception by the community, the program was adopted throughout the United States (Esbensen, et al., 2011). In response to an NIJ initiative, the program was evaluated in the 1990's and again from 2006-2011. In the most recent evaluation, parents, law enforcement officers, and about 3,800 adolescents from thirty one schools in seven cities: Greeley, CO; Chicago, IL; Albuquerque, NM; Philadelphia, PA; Portland, OR; Nashville, TN; and the Dallas/Fort Worth area, TX. Within the schools, classrooms were assigned randomly to the control group or to receive the G.R.E.A.T. program. Researchers obtained parental consent for 3,820 students or 77.9% of all potential students. Students were surveyed in six waves. The first wave occurred immediately after the program. The second wave occurred six months after the program, and each subsequent wave occurred annually. This study utilizes wave six because the adolescents are the oldest, on average sixteen years of age, and it was expected older students were more likely to report market mentality. By wave six, 1,072 participants had dropped out and the number of participants in the final wave was 2,748.

Variables

Dependent Variables

The first dependent variable examines whether adolescents had attacked someone with a weapon. The second dependent variable examines whether adolescents had hit someone with the intent to hurt him or her. The third dependent variable examines burglary with the question have you "gone into or tried to go into a building to steal something?" The fourth dependent variable examines vandalism with the question "Have

you purposely damaged or destroyed property that did not belong to you,” The fifth dependent variable examines stealing something worth more than \$50. The sixth dependent variable examines stealing something worth less than \$50. All of the dependent variables examine where adolescents have engaged in a certain delinquent behavior in the past six months on a zero to 11 scale, with 11 indicating more than ten times. **Independent Variables**

Eight potential market mentality questions were selected from the G.R.E.A.T data. The questions selected are theoretically similar to Hövermann, et al., (2015), Hövermann, et al., (2016), and Groß, Hövermann, and Messner (2018) as the questionnaire includes questions about excessive individualism, monetary fetishism, and prioritizing ones self before others. There have been a variety of ways these authors have measured market mentality. For example, Hövermann, Groß, Zick, & Messner (2015) measured market mentality examining success “(It’s not important how you win but that you win),” individualism “(I think of myself without much regard for others),” monetary fetishism “(No matter where it is from, having money is important)” and market-dominated role performance “(If working overtime is necessary to get ahead, I would spend less time with my friends/family).” Hövermann, Groß, and Messner (2016) operationalized market mentality using Schwartz’s (1992) value scale examining motivations and goals, then developed a market mentality scale by comparing a power and achievement score with benevolence and universalism. Groß, Hövermann, and Messner (2018) measured market mentality using Likert scales comparing success and power with altruistic values. Success was measured using the questions “It’s not important how you win but that you win,” and “The deeds of persons need to be judged by their success.” Power was measured by three questions “There are some persons that

are of less worth than others,” “Some persons did not deserve better,” “It is just when some persons are well off and others are badly off.”

Because a prior market mentality scale has not been created from the G.R.E.A.T. data questions, a factor analysis was used to select the questions most relevant to market mentality. Initially eight market mentality questions were selected which represented power, egotism, and monetary fetishism. After the factor analysis was performed, which is discussed in the results section, the final questions were “If I do things to upset other people, it is their problem not mine,” “I try to look out for myself first, even if it means making things difficult for other people,” and “I will try to get things I want, even if I know it’s causing problems for other people.” The final three market mentality questions were all asked on an early likert scale and were recoded on a 0 to 4 scale that was summed and averaged ($a = .77$).¹

The second group of independent variables comprise of various questions to measure different types of normative flexibility. Therefore, three types of normative flexibility are examined regarding stealing, fighting, and lying to determine which actions impacted by normative flexibility are most likely to lead to either property crime, fighting, or violent crime. This is because it is unlikely all attitudes impacted by normative flexibility contribute equally to delinquent outcomes. The questions selected have traditionally been used to measure neutralization. Nine questions ask about when it is okay to lie, steal, and beat up someone. The neutralization questions about beating up people were included because a number of studies have found marketized individuals also engage in higher levels of violence (Stults and Falco, 2013; Groß, et al., 2018). Each question was originally measured on a likert scale then recoded to where a 0 equals strongly disagree and a 4 equals strongly agree. The first three questions measured

flexibility of lying ($a = .86$).² Flexibility of stealing was also comprised of three questions ($a = .90$).³ Flexibility of fighting was also composed of three questions ($a = .88$).⁴

Control Variables

This study will also control for self-transcending values, solidarity values, race, gender, age, parental education, single parent households, and the nesting of schools within cities, and the G.R.E.A.T. program because half of participants had participated. The first control variable is Altruistic/Self-transcending values. This variable is included because from a theoretical conceptualization, self-transcending values are opposite from market mentality. This is because market mentality requires prioritizing the individual self and material goods above other people, whereas self-transcending values require that a person see themselves in others. This scale resembles Hövermann, et al's., (2016) self transcending scale which contained questions about feeling sympathy for others, trying to understand others, and imagining how others feel. The current self-transcending scale was created with six questions "It feels good to do something without expecting anything in return," "I always do my part," "My involvement in the community improves others' lives," "Teenagers can make a difference in improving their community," "I often think about how my actions affect other people," and "I value Being a Team Member" ($a = .839$). Each question was asked on a one to five scale (1 = strongly disagree, 5 = strongly agree). The questions were recoded on a zero to four scale, the responses were summed, and an average was calculated for the final scale.

The second control variable is solidarity values. This variable is measured using four dichotomous variables (0 = no, 1 = yes). The items included responses to if respondents participated in school, community, religious, or family activities. Each solidarity question is treated as a separate measure and will be loaded into the regression

models separately. These measures also act as measures of social control as they reflect Hirschi's (1969) dimension of involvement in his social bonding theory.

Race, gender, age, single parent households, the spatial location of cities, and the G.R.E.A.T. program are coded as dummy variables. Parental education was measured on a likert scale which was recoded so that a 0 means did not complete high school, a 1 means completed high school, a 2 means completed some college, a 3 means completed college, and a 4 means more than college. The average parent had completed some college ($M = 2.8$, $SD = 1.2$). The average age of participants in the study was 15.45 with the youngest participant being 14 years of age, and the oldest participant being 19 years of age ($M = 15.45$, $SD = .62$). Race included the groups White, Black, Hispanic, Other, and Biracial. Whites were the comparison group and were omitted from the analysis. The spatial locations of schools included the South West, West, South, Mountain, South East, Mid West, and North East. North East was omitted from the analysis because it was the comparison group. Because SPSS treats the value 1 as the control group, when running a negative binomial regression, males, single parent houses, and those who did not go through the G.R.E.A.T. program were assigned a 0.

In wave six of the G.R.E.A.T survey, 49.2% of participants were male ($n = 1,346$) and 50.7% were female ($n = 1,392$). Of the 2,748 participants in wave six ($N = 2,748$), Table 1 shows Whites comprised 27.5% of the sample ($n = 756$), Blacks comprised 15.6% of the sample ($n = 430$), Hispanics comprised 39.1% of the sample ($n = 1,074$), Asians comprised 4.8% of the sample ($n = 132$), the category Other comprised 1.5% of the sample ($n = 41$), 9.2% indicated they were Bi-racial ($n = 252$), and 1% of respondents did not answer ($n = 26$).

Table 1
Descriptive Statistics of Independent, Mediating, and Dependent Scales

	N	Mean	SD	Range
Race				
White	756	0.27	0.44	0-1
Black	430	0.15	0.36	0-1
Hispanic	1,074	0.41	0.48	0-1
Other	210	0.09	0.12	0-1
Biracial	252	0.10	0.28	0-1
Gender				
Male	1,346	.492	0.5	1
Female	1,392	.507	0.5	0
Age	2694	15.45	0.62	14-19
Parental Education	2290	2.13	1.28	0-4
Market Men.	2738	1.31	.805	0-4
Flex/Neutral	2738	1.73	.805	0-4
Attack With Weapon	2738	.19	1.16	0-11
Fighting	2738	.85	2.22	0-11
Burglary	2738	.23	1.27	0-11
Vandalism	2704	.54	1.75	0-11
Stealing More Than \$50	2658	.61	1.93	0-11
Stealing less Than \$50	2704	.26	1.40	0-11
Location				
Southwest	2738	.136	.343	0-1
West	2738	.137	.344	0-1
South	2738	.168	.374	0-1
Mountain	2738	.152	.359	0-1
Southeast	2738	.168	.374	0-1
Northeast	2738	.117	.322	0-1
Midwest	2738	.118	.322	0-1

Analysis Plan

This study will conduct four sets of analyses which include: constructing a market mentality measure from the G.R.E.A.T. data, testing if market mentality is empirically distinct and theoretically distinct from normative flexibility, testing if normative flexibility predicts market mentality, and performing a series of regressions to determine if market mentality mediates normative flexibility and delinquency.

The first analysis will construct a market mentality scale from the G.R.E.A.T. data. This is because eight potential market mentality questions have been selected that are similar to past questions measuring market mentality. However, while the questions may be similar, a factor analysis needs to be performed to ensure the questions load together under a single component. To ensure this, a scree plot and factor analysis will be utilized to determine which of the eight potential market mentality questions should be included for the final analysis. All questions that have an eigenvalue above 1 will be kept whereas the questions that have an eigenvalue below 1 will be discarded. The result from each remaining question will be summed and averaged to create an overall market mentality scale.

The second analysis will test if market mentality and normative flexibility are empirically distinct and theoretically distinct. This assumption will be tested using a factor analysis. If normative flexibility is embedded in market mentality, there should be a single component or overlap between multiple components. However, if the concepts are distinct, the components should not have any overlap, with values for each factor being near 1.

The third analysis will examine if normative flexibility is a significant predictor of market mentality. To accomplish this, first a multiple regression analysis will be run to determine if normative flexibility predicts market mentality. If normative flexibility does not predict market mentality, there will not be a reason for a more advanced test.

The final analysis will consist of a series of Poisson or negative binomial regressions depending on which has the better model fit to determine if market mentality and normative flexibility are significantly related to attacking someone with a weapon, hitting others, burglary, vandalism, stealing more than \$50 dollars, and stealing less than

\$50 dollars. It is likely a negative binomial model will be utilized because in all of the outcomes, the variance is greater than the mean violating an assumption of the Poisson distribution (Hutchinson and Holtman, 2005).

Results

To prepare for performing a factor analysis Bartlett's test of sphericity was performed to ensure a factor analysis was appropriate for the dataset. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis $KMO = .812$ and Bartlett's test of sphericity $X^2(28) = 4,185.76, p < .000$, meaning there was enough variance in the data to perform a factor analysis.

To select the market mentality questions, a maximum likelihood factor analysis and scree plot with the Kaiser's criterion of eigenvalues greater than 1 yielded a two-factor solution as the best fit for the data, accounting for 51.52% of the variance. However, the third factor was also included as it had an eigenvalue of .962, and with it, the accounted variance increased to 63.54%. Furthermore this variable is theoretically relevant to market mentality. The first market mentality factor was "If I do things to upset other people, it is their problem not mine." This factor had an eigenvalue of 2.94 and accounted for 36.7% of the variance. The second market mentality factor was "I will try to get things I want, even if I know it's causing problems for other people." This factor had an eigenvalue of 1.18 and accounted for 14.7% of the variance. The third market mentality factor included was "I try to look out for myself first, even if it means making things difficult for other people." This factor had an eigenvalue of .962 and could explain 12% of the variance. "If I do things to upset other people, it is their problem not mine" and "I try to look out for myself first, even if it means making things difficult for other people" is indicative of excessive individualism. The second question "I will try to get

things I want, even if I know it's causing problems for other people" indicates a mental state of valuing possessions over people, which is monetary fetishism. The three questions were summed and averaged to create a single market mentality scale ($a = .77$).

Once the market mentality questions were selected, an exploratory factor analysis was performed. The extraction method utilized principal component analysis and a Varimax rotation with Kaiser Normalization method was used. This yielded a five-component solution as the best fit for the questions. Because this was the number of distinct theoretical concepts that were included, the measurement scales were measuring their intended theoretical constructs.

Table 2
Rotated Component Matrix for Market Mentality, Flexibility, and Transcending Values

	Component					Dimension
	1	2	3	4	5	
Feels good to work without pay	.738	-.160	-.050	-.206	-.004	Self Transcending Values
Do part involvement in comm. helps	.728	-.076	-.064	-.144	.034	
I can make a diff. in Comm.	.688	-.026	-.105	.041	-.157	
My actions affect others	.763	-.101	.013	-.061	-.036	
Value team member	.719	-.218	-.047	-.048	-.099	
Look out for self	.743	-.060	.003	-.167	.025	
Not my problem	-.134	.763	.133	.077	.152	Market Mentality
Get by any means	-.208	.787	.118	.144	.137	
It's okay tell small lie	-.160	.776	.142	.237	.114	
It's okay to lie to help	-.003	.140	.831	.121	.182	Flexibility Lying
It's okay to lie to stop trouble	-.094	.118	.819	.233	.246	
It's okay to steal from rich	-.100	.166	.816	.235	.209	Flexibility Stealing
	-.156	.160	.245	.829	.157	

It's okay to steal from store	-.179	.157	.196	.865	.150	
It's okay to steal	-.170	.181	.167	.828	.202	
It's okay to fight if I'm hit first	-.087	.172	.216	.163	.816	Flexibility Fighting
It's okay to fight for rights	-.028	.157	.183	.166	.862	
It's okay to fight a threat	-.057	.102	.217	.140	.865	

Notes. Extraction method; Principal Component Analysis; Rotation method; Varimax with Kaiser Normalization.

The factor analysis results show that market mentality and normative flexibility are empirically distinct as well as theoretically distinct. In addition, there was very little overlap between the separate components indicating appropriate questions had been selected to represent each theoretical construct. Because these are separate constructs attention was turned to determine if neutralization predicts market mentality.

Regression Results

A multiple linear regression was calculated to predict if neutralization, solidarity values, and self-transcending values is a significant predictor of market mentality, while controlling for race, gender, age, single parent households, parental education, and the nesting of schools within cities. It is predicted that neutralization will be significant in predicting market mentality. Table 3 shows the result of the multiple regression model.

In table 3, a significant regression equation was found ($F(25, 2143) = 43.407, p < .000$) with an R^2 of .336. This model indicates for each unit increase in transcending values market mentality decreases -.278. All three flexibility measures and transcending values were significant predictors of market mentality $p < .000$. For each unit increase in flexibility of lying, market mentality increases .155, for each unit increase in flexibility

stealing, market mentality increases .174, and for each unit increase in flexibility fighting, market mentality increases .109.

Table 3

Summary of Multiple Regression Analysis for Flexibility predicting Market Mentality (N = 2,748)

Variable	B	SE B	Sig.
Transcending Values	-.278	.027	***.000
Flexibility Lie	.155	.020	***.000
Flexibility Steal	.174	.021	***.000
Flexibility Fight	.109	.015	***.000
Age	.073	.026	** .006
Single Parent House	.043	.035	.216
Highest Parent Ed.	-.024	.013	.052
Involve in School Act.	-.024	.036	.491
Involve in Community Act.	-.028	.034	.415
Involve in Religious Act.	-.053	.033	.106
Involve in Family Act.	-.052	.036	.144
Great Participation	.010	.030	.726
Males	-.001	.031	.984
Black	.287	.051	***.000
Hispanic	.057	.042	.182
Other	.081	.136	.554
Biracial	-.005	.056	.923
Southwest	.029	.060	.629
West	-.047	.065	.465
South	.034	.059	.572
Mountain	.075	.061	.225
Southeast	.053	.063	.400
Midwest	.120	.064	.059
G.R.E.A.T.	-.010	.030	.739

R² .33

***p < .000. **p < .01. *p < .05.

Furthermore, Age was significant at the $p < .01$ level indicating for each additional year of age, market mentality increases .073, and blacks are more likely when compared to whites to develop market mentality $p < .000$. These results indicate that when individuals develop flexibility, they will then go on to adopt a new moral standard

of market mentality. This provides preliminary evidence that normative flexibility leads to market mentality that may then lead to delinquent outcomes.

To test if market mentality mediates normative flexibility and delinquent outcomes, six poisson models were compared with six negative binomial models to determine which provided the better fit. For all twelve models, the Akaike Information Criterion, Bayesian Information Criterion, and log-likelihood indicated the negative binomial models provided the better fit.

In table 4, twelve negative binomial models were used to examine the effect of market mentality and flexibility/neutralization, on attacking someone with a weapon, fighting, burglary, vandalism, stealing more than \$50 dollars, and stealing less than \$50 dollars. Two models were run for each of the six outcomes. The first models of each outcome tested if flexibility regarding lying, stealing and fighting was significant without market mentality. The second model of each outcome tested if flexibility would no longer be significant after the inclusion of market mentality. Each outcome accounted for a significant amount of the variance.

Table 4
Summary of Negative Binomial Regression Examining Market Mentality and Flexibility

Model # Variables	Attack with Weapon				Fighting				Burglary			
	1		2		3		4		5		6	
	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>SE B</i>
MM	--	--	.269	.093**	--	--	.404	.049***	--	--	.398	.086***
Flex Lie	-.082	.090	-.139	.100	.090	.051	.014	.052	-.165	.091	-.246	.093**
Flex Steal	1.04	.078***	.981	.092***	.452	.045***	.393	.046***	1.14	.084***	1.06	.085***
Flex Fight	.117	.112	.107	.078	.419	.039***	.385	.039***	.024	.069	-.002	.069
Transcend	-.565	.152***	-.531	.114***	-.360	.065***	-.275	.067***	-.516	.103***	-.464	.104***
Family Solidarity	-.465	.156**	-.476	.153**	-.016	.083	.012	.084	-.129	.142	-.127	.144
School Solidarity	-.568	.167***	-.540	.157***	-.061	.082	-.046	.083	-.344	.142**	-.305	.144*
Comm. Solidarity	.276	.156	.290	.168	-.076	.083	-.041	.084	.406	.148**	.428	.150**
Religion Solidarity	.363	.056*	.358	.156*	.192	.080**	.210	.081**	.193	.140	.186	.141
Parent Ed. Single Parent.	-.102	.147	-.090	.056	.005	.029	.007	.029	.017	.049	.023	.049
Age	.215	.098	.220	.148	.127	.079	.170	.080	.357	.131**	.371	.131*
Age	.597	.147***	.570	.098***	.092	.059	.037	.060	.335	.092***	.295	.092***
Males	.667	.214***	.659	.148***	-.021	.074	-.019	.074	.738	.133***	.719	.134***
Black	.579	.194**	.558	.215**	.450	.113***	.358	.114**	.285	.191	.236	.193
Hispanic	-.288	.297	-.310	.194	-.350	.105***	-.392	.106***	-.505	.174**	-.516	.176**
Biracial	-.276	.398	-.227	.299	.079	.130	.153	.132	.200	.226	.215	.229
Other	-.530	.299	-.472	.401	-.616	.188***	-.544	.189**	-.267	.318	-.228	.320
South W	-.828	.302**	-.776	.300**	-.233	.139	-.173	.141	-.427	.280	-.332	.283
West	.147	.234	.259	.305	-.448	.146**	-.316	.148*	.121	.269	.332	.274
South	.447	.259	.511	.236*	-.072	.128	.018	.130	.957	.221***	1.06	.226***
Mountain	.622	.275*	.695	.261**	-.475	.146***	-.410	.147**	.501	.255*	.585	.258*
South E	-.280	.243	-.302	.277	-.373	.135**	-.303	.136*	-.333	.261	-.281	.265
Mid W	.191	.132	.264	.244	-.218	.140	-.090	.142	.712	.237**	.820	.239***
Great	-.146	.099	-.141	.133	-.029	.071	-.025	.072	-.227	.119	-.211	.120

****p* < .000. ***p* < .01. **p* < .05.

Table 4 Cont.

Summary of Negative Binomial Regression Examining Market Mentality and Flexibility

Model # Variables	Vandalism		Stealing More than \$50				Stealing Less than \$50					
	7 B	7 SE B	8 B	8 SE B	9 B	9 SE B	10 B	10 SE B	11 B	11 SE B	12 B	12 SE B
MM	--	--	.377	.060***	--	--	.345	.086***	--	--	.182	.061**
Flex Lie	-.030	.063	-.104	.064	-.334	.093***	-.395	.095***	.014	.063***	-.030	.064
Flex Steal	.878	.056***	.800	.058***	1.45	.090***	1.36	.092***	1.09	.060***	1.07	.061***
Flex Fight	.252	.049***	.221	.049***	.080	.070	.068	.070	.197	.049*	.179	.049***
Transcend	-.485	.076***	-.431	.078***	-.535	.100***	-.522	.101***	-.157	.077*	-.102	.079
Family Solidarity	-.060	.100	-.038	.101	-.240	.140	-.252	.141	-.120	.099	-.122	.099
School Solidarity	-.008	.101	.006	.102	-.445	.137***	-.451	.138***	-.416	.098***	-.410	.099***
Comm. Solidarity	.161	.102	.172	.103	.083	.147	.132	.148	.347	.102***	.365	.103***
Religion Solidarity	.245	.096**	.261	.096**	.554	.138***	.560	.139***	.231	.095**	.238	.096**
Parent Ed.	-.009	.036	-.005	.036	-.055	.050	-.040	.050	-.028	.035	-.027	.035
Single Parent.	.318	.097**	.351	.098***	.512	.128***	.523	.128***	.233	.093**	.224	.093**
Age	.060	.067	.027	.068	.155	.088	.117	.089	.029	.068	.018	.069
Males	.507	.090***	.520	.091***	.475	.128***	.463	.129***	.259	.090**	.262	.090**
Black	-.154	.151	-.269	.153	-.162	.198	-.225	.201	-.210	.151	-.257	.152
Hispanic	-.013	.122	-.046	.123	-.326	.170*	-.360	.170*	-.067	.121	-.044	.121
Biracial	-.132	.168	-.076	.169	.166	.226	.148	.228	.360	.151**	.364	.151**
Other	-.276	.214	-.222	.215	-.267	.300	-.168	.301	.193	.186	.183	.186
South W	-.024	.175	.012	.177	-.837	.253**	-.569	.255*	-.001	.176	-.097	.177
West	-.358	.191	-.248	.193	-.525	.259	-.203	.263	.213	.177	.175	.179
South	.108	.164	.182	.167	.082	.215	.360	.218	.351	.164*	.257	.165**
Mountain	.119	.173	.156	.175	.223	.229	.484	.231*	.142	.176	.039	.177
South E	-.478	.180**	-.442	.182*	-.334	.247**	-.614	.249**	-.446	.182**	-.545	.182*
Mid W	.023	.178	.112	.179	--	--	.419	.233	.200	.178	--	--
Great	.158	.086	.147	.087	-.155	.116	--	--	.169	.084*	.176	.084*

*** $p < .000$. ** $p < .01$. * $p < .05$.

Out of the three flexibility measures, flexibility in stealing had the strongest coefficients that were significant for eleven of the twelve outcomes. Unsurprisingly, flexibility in stealing had the strongest effects on stealing outcomes such as burglary, stealing more than \$50, and stealing less than \$50. It also had a strong coefficient on attacking someone with a weapon. For example, in model 1, the coefficient was 1.04. This means given that the other variables are held constant, if an adolescent were to increase their flexibility in stealing score by one point, the difference in the logs of expected counts would be expected to increase by 1.04 units. When converted to an incident rate ratio, for each unit increase in flexibility of stealing, attacking someone with a weapon would be expected to increase by a factor of 2.851, while holding all other variables in the model constant.

In regards to the variable flexibility of fighting, it had the strongest effect on fighting out of all the outcomes. Yet, this effect was still smaller than flexibility of stealing. This means for model 3, for each unit increase in flexibility of fighting, the incident rate ratio for the outcome fighting would be expected to increase by a factor of 1.571. Flexibility of fighting had the smallest coefficient on model 12, stealing less than \$50, at .179. This means for model 12, for each unit increase in flexibility of fighting, the incident ratio for the outcome stealing less than \$50 would be expected to increase by a factor of 1.197, while holding all other variables constant.

Flexibility in attitudes regarding lying was significant in only four outcomes. The only outcome where flexibility in lying contributed to an increase in delinquency was stealing less than \$50 dollars, however the increase for the difference in the logs of expected counts was small at .014. This means for every one unit increase in flexibility of lying in adolescents, the incident rate ratio for stealing less than \$50 would be expected to

increase by a factor of 1.018, while holding all other variables in the model constant. Interestingly, flexibility of lying was negatively associated with the outcome burglary for model 6, and the outcome stealing more than \$50 dollars for both models. This indicates as flexibility in lying increases in adolescents, they will be less likely to steal something worth more than \$50 dollars. For example in model 10, given that the other variables are held constant, if an adolescent were to increase their flexibility in lying score by one point, the difference in the logs of expected counts would be expected to decrease by .334 units. When converted to an incident rate ratio, for each unit increase in flexibility of lying, stealing more than \$50 dollars would be expected to decrease by a factor of .673, while holding all other variables in the model constant.

Market mentality was significant in each of the six outcomes. Market mentality had the strongest coefficient for fighting at .404. When converted to an incident rate ratio, for each unit increase in market mentality in adolescents, their rate for fighting would be expected to increase by a factor of 1.498, while holding all other variables in the model constant. Market mentality had the weakest coefficient for stealing less than \$50 at .182. When converted to an incident rate ratio, for each unit increase in market mentality in adolescents, their rate for stealing less than \$50 would be expected to increase by a factor of 1.199, while holding all other variables in the model constant.

There were multiple instances in which the flexibility measures were significant depending on whether market mentality was included in the model or not. For example, flexibility regarding lying was only significant in one of the models of the outcomes burglary and stealing less than \$50, and either lost or gained significance when market mentality was included. The same was true for flexibility of fighting regarding stealing less than \$50. Overall, the market mentality results were consistent with the past two

pieces of research that have examined market mentality in adolescents (Stults and Falco, 2013; Groß et al., 2018). However, there was not evidence that market mentality is a mediating variable as the results for flexibility were similar after market mentality was included. Therefore this study has failed to reject the null hypothesis that market mentality mediates normative flexibility and property crime and violent crime.

For the control variables, transcending values were negatively associated with ten out of the twelve delinquent outcomes. This means the higher the level transcending values were in adolescents, the less likely they were to engage in the delinquent outcomes. Transcending values had the strongest protective effect on attacking someone with a weapon. This means, when an incident rate ratio is calculated, if an adolescent were to increase their transcending values by a one unit increase, their rate for attacking someone with a weapon would be expected to decrease by a factor of 1.309, while holding all other variables in the model constant.

Several of the solidarity measures had surprising results. For example, while involvement in school showed protective effects across nearly all outcomes, religious involvement contributed to delinquent outcomes for adolescents. This is a surprising finding as multiple studies have found the opposite for religious influence (Donahue and Benson, 1995; Shina, Cnaan, and Gelles, 2007; Petts, 2009). Initially this outcome was assumed to be a coding error, and was rechecked with the original data, however, the results remained the same. Because of this, the validity of the solidarity measures is in question.

Single parent families were not a risk factor for violent crimes, but they were for property crimes such as burglary, vandalism, stealing more than \$50, and stealing less than \$50. Older participants indicated they were more likely to be involved in the

outcomes attacking someone with a weapon $p \leq .001$ or burglary $p \leq .001$ (model 5). Males were more likely than females to partake in attacking someone with a weapon, burglary, vandalism, and stealing more or less than \$50. Black participants were more likely than whites to engage in attacking someone with a weapon and burglary (model 6). Hispanics were less likely than whites to be involved in fighting and burglary. Participants who indicated they were biracial were more likely than whites to steal less than \$50 $p \leq .01$. Attacking someone with a weapon was less likely to occur in the Southwest as compared to the Northeast $p \leq .01$. Burglary was more likely to occur in the south than the northeast $p \leq .001$. In regard to the dummy variables, the category white and northeast were omitted from the study results as they were treated as the comparison groups. In addition, the variable Midwest was not included in model 9 and 12, and participation in the Great program was not included in model 10, as these variables resulted in a failure for the negative binomial regression to converge.

Discussion

Prior research has considered normative flexibility to be embedded within market mentality. This paper provided evidence with a factor analysis this is not the case and instead market mentality and normative flexibility are empirically distinct as well as theoretically distinct. However, the hypothesis claimed that Market mentality mediates the relationship between normative flexibility and delinquency however this hypothesis was not supported. This is because the results for flexibility were similar even after market mentality was included. This indicates both market mentality and normative flexibility are pathways leading to delinquent outcomes.

While this paper failed to reject its null hypothesis, it does confirm Messner, et al's., (2008) hypothesis which has never been fully tested. Messner et al (2008) stated in

a discussion of IAT, “that the likelihood of criminal violence will be high when actors are not particularly sensitive to the moral status of the means of action.” The results show that if a person possesses both normative flexibility and market mentality then the likelihood of criminal action is increased. Therefore, both market mentality and normative flexibility directly contribute to delinquent outcomes. However, neutralization does not only increase the risk for delinquency, but it also can create a pathway for individuals to develop market mentality as the results in table three suggest. Therefore it appears neutralization can lead to market mentality, which then leads to delinquency, but it can also lead to delinquency in and of itself.

The findings from table 3 that the risks of market mentality increases as adolescents get older, and that neutralization is a significant predictor of market mentality is important. This is because it may provide clinicians with a method to prevent the development of market mentality through treating neutralizations, thereby reducing the likelihood of criminal activities.

IAT may have provided an important clue as to how techniques of neutralization develop. Sykes and Matza (1957) thought the techniques are learned, yet, IAT predicts normative flexibility occurs due to a weakening of social controls. As was explained earlier, anomie encourages individuals to neutralize the traditional moral standard that has been weakened and develop market values. Because of this, in a marketized society, it may be that Matza’s (1964) techniques of neutralization create a natural pathway that allows individuals to develop market mentality. If such a process occurs, anomie may make it easier to adopt and apply techniques of neutralization to a variety of different behaviors, and thereby lead to market mentality. However, this is still an open question, and an avenue for future research to explore with longitudinal data.

Another area for future research is examining how multiple types of neutralizations impact market mentality and delinquency. There are multiple types of neutralizations (Kaptein and Helvoort, 2018), and they likely lead to various outcomes depending on specific situations.

This study examined only three neutralizations and the results suggest market mentality and flexibility have different outcomes for different types of delinquency. For example, There were several instances in which the flexibility measures were significant depending on whether market mentality was included or not. This indicates market mentality and neutralizations have different types of direct effects on the other.

A final area for future research is to examine solidarity values and self-transcending values as interaction effects. This is because according to IAT as social controls weaken, and normative flexibility is developed, solidarity levels and self-transcending levels continue to decrease as market mentality increases. As a result, solidarity levels and self-transcending values ultimately impact delinquent outcomes. Therefore, the examining the interaction effects using structural equation modeling would provide a more complete picture of the process IAT describes.

Limitations

This study was not without multiple limitations. The first major limitation of this study is that it is not a true test of mediation because this study did not use longitudinal data. Before any conclusions can be drawn, future research needs to use longitudinal data to determine if a weakening of social controls leads to an increase of neutralizations, then if neutralization leads to market mentality. Until this can be confirmed the results should be interpreted with caution.

An additional limitation was that this study lacked a variety of social control measures. IAT clearly states the penetration of market values into noneconomic institutions weakens social controls. Therefore, the inclusion of different types of social controls as control variables would have made for a stronger study.

Another limitation was that this study used the terms normative flexibility and neutralization interchangeably, which may be confusing for readers. However this points to a larger issue where a discussion needs to occur amongst IAT scholars whether the term normative flexibility should be abandoned in the IAT literature in favor of techniques of neutralization. There are multiple forms of neutralizations that have been discussed in the literature, and there has been a debate about the abundance of terms (Henry, 1976; LI Chi-mei, 2008). Because of this neutralization scholars are warning this will present problems for future researchers (Mauruna and Copes, 2005). Such a discussion needs to occur in the IAT literature as normative flexibility, moral flexibility and neutralization are used interchangeably, and this may lead to inconsistent research findings.

Conclusion

This paper has contributed to the existing literature on IAT in a number of ways. The first contribution shows that market mentality and normative flexibility are both empirically distinct as well as theoretically distinct. This paper then was able to show that flexibility is a significant predictor of neutralization. Finally, the results on a series of negative binomial regressions suggest flexibility and market mentality seem to both have direct effects on the other as there were multiple instances in which the flexibility measures were significant depending on whether market mentality was included in the model or not. Overall, however, the results show that neutralization and market mentality

both contribute to delinquent outcomes. Finally, this paper found support for Messner, et al's., (2008) hypothesis that the risk of criminal activity is greatest in those who have high levels of moral flexibility.

References

- Chamlin, M. B., & Cochran, J. K. (1995). Assessing Messner and Rosenfeld's institutional anomie theory: A partial test. *Criminology*, *33*(3), 411–429.
- Chamlin, M. B., & Cochran, J. K. (1997). Social altruism and crime. *Criminology*, *35*(2), 203–226. doi:10.1111/j.1745-9125.1997.tb00875.x
- Donahue, M. J., & Benson, P. L. (1995). Religion and the Well-Being of Adolescents. *Journal of Social Issues*, *51*(2), 145–160. <https://doi.org/10.1111/j.1540-4560.1995.tb01328.x>
- Durkheim, E. (1897/951). *Suicide*. Translated by 'John A. Spaulding and George Simpson. New York: Free Press.
- Esbensen, F., Peterson, D., Taylor, T., Freng, A., Osgood, W., Carson, C., & Matsuda, N. (2011). Evaluation and evolution of the gang resistance education and training (G.R.E.A.T.) program. *Journal of School Violence*, *10*(1), 53–70. doi: 10.1080/15388220.2010.519374
- Hirschi, T. (1969). *Causes of delinquency*. New Brunswick, NJ: Transaction Publishers.
- Faris, R., & Ennett, S. (2012). Adolescent aggression: The role of peer group status motives, peer aggression, and group characteristics. *Social Networks*, *34*(4), 371–378.
- Grasmick, H., Tittle, C., Bursik, R., & Arneklev, B. (1993). Testing the core empirical implications of Gottfredson and Hirschi's General Theory of Crime. *Journal of Research in Crime and Delinquency*, *30*, 5–29.
- Groß, E., Hövermann, A., & Messner, S. F. (2018). Marketized mentality, competitive/egoistic school culture, and delinquent attitudes and behavior: An application of institutional anomie theory. *Criminology*, *56*(2), 333–369.

- Henry, S. (1976). Fencing with accounts: The language of moral bridging. *British Journal of Law and Society*, 3(1), 91–100. doi: 10.2307/1409802
- Hövermann, A., Groß, E. M., & Messner, S. F. (2015). Understanding the devaluation of vulnerable groups: A novel application of Institutional Anomie Theory. *Social Science Research*, 52. 408-421.
- Hövermann, A., Groß, E. M., & Messner, S. F. (2016). Institutional imbalance, integration into non-economic institutions, and a marketized mentality in Europe: A multilevel, partial elaboration of institutional anomie theory. *International Journal of Comparative Sociology*, 57(4), 231–254.
- Hövermann, A., Messner, S. F., & Zick, A. (2015). Anomie, marketization, and prejudice toward purportedly unprofitable groups. *Acta Sociologica*, 58(3), 215–231.
- Hövermann, A., Messner, S. F. (2019). Institutional imbalance, marketized mentality, and the justification of instrumental offenses: A cross-national application of institutional anomie theory. *Justice Quarterly*, 1-26.
- Hutchinson, M. K., & Holtman, M. C. (2005). Analysis of count data using poisson regression. *Research in Nursing & Health*, 28(5), 408–418. doi: 10.1002/nur.20093
- Kaptein, M., & Helvoort, M. van. (2019). A Model of Neutralization Techniques. *Deviant Behavior*, 40(10), 1260–1285.
<https://doi.org/10.1080/01639625.2018.1491696>
- LI Chi-mei, J. (2008). Neutralization Techniques, Crime Decision-making and Juvenile Thieves. *International Journal of Adolescence and Youth*, 14(3), 251–265. doi 10.1080/02673843.2008.9748006

- Maruna, S., and Copes, H. (2005). What have we learned from five decades of neutralization research? *Crime and Justice* 32:221–320. doi: 10.1086/655355
- Matza, D. (1964). *Delinquency and drift*. New York: John Wiley & Sons.
- Messner, S.F. & Rosenfeld, R. (1994) *Crime and the American dream*. Belmont California: Wadsworth Publishing Co.
- Messner, S. F., & Rosenfeld, R. (1997). Political restraint of the market and levels of criminal homicide: A cross-national application of institutional-anomie theory. *Social Forces*, 75(4), 1393–1416.
- Messner, S. F., Thome, H., & Rosenfeld, R. (2008). Institutions, anomie, and violent crime: Clarifying and elaborating institutional-anomie theory. *International Journal of Conflict and Violence*, 2(2), 163–181.
- Muftić, L. R. (2006). Advancing institutional anomie theory. *International Journal of Offender Therapy and Comparative Criminology*, 50(6), 630–653.
- Petts, R. J. (2009). Family and Religious Characteristics' Influence on Delinquency Trajectories from Adolescence to Young Adulthood. *American Sociological Review*, 74(3), 465–483. doi.org/10.1177/000312240907400307
- Rosenberger, J. S. (2016). Television consumption and institutional anomie theory. *Sociological Focus*, 49(4), 305–325.
- Savolainen, J. (2000). Inequality, welfare state, and homicide: Further support for the institutional anomie theory. *Criminology*, 38(4), 1021–1042.
- Sinha, J. W., Cnaan, R. A., & Gelles, R. J. (2007). Adolescent risk behaviors and religion: Findings from a national study. *Journal of Adolescence*, 30(2), 231–249. doi.org/10.1016/j.adolescence.2006.02.005

- Stults, B., and Falco, C. (2014). Unbalanced institutional commitments and delinquent behavior: An individual-level assessment of institutional anomie theory. *Youth, Violence and Juvenile Justice*, 12, 77–100.
- Sykes, G. M., & Matza, D. (1957). Techniques of neutralization: A theory of delinquency. *American Sociological Review*, 22(6), 664-670. doi: 10.2307/2089195
- Zito, R. C. (2018). Institutional anomie and justification of morally dubious behavior and violence cross-nationally: A multilevel examination. *Australian & New Zealand Journal of Criminology*.

Footnotes

1 When the factor analysis was run on the eight market mentality questions, two components were detected. The first component included the questions, look out for self, not sympathetic to others, when I make others upset its not my problem, and get by any means. The second component included the questions, avoid paying for things, people act out of self-interest, and I only work for pay. However, the eigen values for the questions in the second component were lower than those for component 1.

– The three market mentality questions that were used for the paper are part of Grasmick, Tittle, Bursik, and Arnekley's (1993) scale measuring self-centeredness.

2 "It's okay to tell a small lie if it doesn't hurt anyone," "It's okay to lie if it will keep your friends from getting in trouble with parents, teachers, or police." "It's okay to lie to someone if it will keep you out of trouble with them."

3 "It's okay to steal something from someone who is rich and can easily replace it." "It's okay to take little things from a store without paying for them since stores make so much money that it won't hurt them." "It's okay to steal something if that's the only way you could ever get it."

4 "It's okay to beat up someone if they hit you first" "It's okay to beat up someone if you have to stand up for or protect your rights." "It's okay to beat up someone if they are threatening to hurt your friends or family."

