The Theory Chaos in Sociology and how to Overcome It

The Example of Theories of Deviant Behavior and Crime

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Introduction

For many social phenomena there are several theories which aim at explaining them. Examples are

- theories of migration
- theories about the causes of prosperity of nations
- theories of protest

We do not know which theory provides the best explanation.

This is the situation in **criminology** as well. In what follows I will first characterize this situation. I will then deal with the question how this situation can be improved.

Contents

- The theory chaos in criminology

- A research program to improve the situation: "Analytical Criminology"

- An example to illustrate the program and the difficulties to implement it: Gottfredson and Hirschi's "general theory of crime" (self-control theory).

Terminological Note

- **Crime** = df. deviation from the criminal codes (most frequent definition in criminology).

- **Theory** = df. a general conditional statement.

- **Criminological theory** = theory that explains crime.

The Theory Chaos in Criminology

In a handbook "21st Century Criminology" (Miller 2009) **28 criminological theories** are listed.

Here are a few examples (that you perhaps know):

- Anomie theory
- Strain theory
- Differential association theory
- Social structure social learning theory
- Self-control theory
- Disorganization theory (ecological approach – Shaw and McKay)
- etc. etc. etc.

There are further different **approaches** (mainstream and Marxist criminology) and **general behavioral theories** are applied. These are in particular rational choice theory and behavioral learning theory.

Most existing criminological theories suffer from **serious weaknesses**, in particular:

- The **structure of the theories** is not clear;
- the **relationships between the hypotheses of a <u>given</u> theory** are not clear;
- each theory consists of **different versions – their difference is not clear** (is one better than the other?);
- there is **ambiguity of the concepts** of theories;

- the **relationships between the theories** (or versions) is not clear;
- deficiencies in the **informative content** of the theories;
- **there are few comparative tests of theories**.

What Could Be Done?

There could be a systematic **empirical comparison** and, depending on the results, then an **integration** of the theories (i.e. formulating some new theory, based on the results).

There are two possibilites of such a **research program**:

(1) Comparing criminological theories <u>with each other</u>: horizontal theory comparison

There are discussions of such a program and many theory comparisons (for a summary see Akers et al. 2016: chapter 15).

Problem: There is unanimity among criminologists that so far the **superior criminological theory has not been found**.

(2) Comparing <u>general behavioral theories</u> with criminological theories

In the literature most of the time **rational choice theory (RCT)** is applied to explain crime. Most of the time a **wide version** is applied.

- The basic **argument for choosing <u>RCT</u>** is that this theory is **widely applied** in the social sciences – e.g. heuristics and biases research program, behavioral economics and game theory, public choice, **and** for explaining crime.

- If RCT is a fruitful theory it should be possible to **derive** existing **criminological theories in their present form or suggest conditions for their validity**.
    - An example is Edwin H. Sutherland's principal of differential association: If **exposure to positive „definitions" of crime** exceeds those of conformity, crime is likely. RCT would suggest that this holds only if being exposed to such „definitions" provides strong incentives to crime.
- This provides an **integration**: the criminologal theory becomes a corollary of RCT.
- Whether this theoretical analysis is correct must be **empirically tested**.

> This is theory comparison is a basic component of a research program that could be called **Analytical Criminology**

The theory comparison thus involves **two steps**:

- **Theoretical analysis**: what are the implications of RCT?
- **Empirical analysis**: are the implications confirmed by empirical research?

Self-Control Theory (SCT)

I will **illustrate** a theory comparison of RCT and criminological theories with an example: **self-control theory (SCT)**.

This theory has first been suggested by

> Gottfredson, Michael R., and Travis Hirschi. 1990. *A General Theory of Crime. Stanford: Stanford University Press.*

(1) It is one of the most **intensely discussed** criminological theories.

(2) The theory is very **well confirmed** by numerous empirical studies.

For example, Britt and Gottfredson 2003; Goode 2008; Gottfredson 2017: 2; 2018: 353-355; see also the meta-analyses by Pratt and Cullen 2000; Vazsonyi et al. 2017.

Is it still useful to apply RCT?

The concept of self-control (SC)

Low SC is defined by Gottfredson (2017: 3) as an

> "**inclination** to focus on the **short-term** rather than the long-term, on immediate gratification of **needs**, and on wants and desires (whatever they may be), and **not** on the longer-term negative consequences of behavior" (3).

„**Inclination" (or „ability")** is a **disposition concept** – such as being „aggressive" or being a „good" goal keeper.

Such dispositions are **not directly observable** – like having black hairs. They are ascribed on the basis of **certain behaviors in certain situations** (e.g. Hempel 1952, based on Carnap 1936).

Being a <u>good</u> goal keeper:

Situation S: shots on the goal;
Relevant behavior B: number of shots the keeper catches;
Disposition D – „**good**" goal keeper -- is given if a certain number of shots is caught (= the situation).

Structure of the concept:

If a certain **situation S** is given, then the **disposition D** is ascribed if the **behavior B** is performed.   (x) [Sx $\Rightarrow$ (Dx $\Leftrightarrow$ Bx)]

Low self-control („inclination"… „to focus on …"):

(**Situation S**: Possibility of enjoying short-term pleasures and ignoring long-term negative consequences by means of behavior B) $\Rightarrow$ (**Disposition D:** LowSC $\Leftrightarrow$ **Reaction**: B is performed)

Example: smoking

Problem: what are these situations? How often must which action be performed to ascribe the disposition of low SC?

Low SC has never been measured in this way!

It seems that no author who writes about self-control theory is aware that this is a disposition concept!

Instead, measures are **scales consisting of various self-descriptions** of respondents. A popular one is the scale by Grasmick et al. 1993 – see below.

Thus, the **first problem** of the theory is that the major concept – low SC – is not clearly defined.

The Theory (SCT=social control theory)

The **dependent variable** – refers, among other things, to violations of the criminal code.

The major **independent variable** is the **inclination to exercise self-control**.

Theory: Low SC is likely to generate **crime** – always:

"As a general cause, **it should predict rate differences everywhere**, for all crimes, delinquencies and related behaviors, **for all times**, among all groups and countries" (Gottfredson 2006: 83, also Gottfredsion 2011: 94). This is, thus, a **law**:

Low self-control $\xrightarrow{\ +\ }$ Crime

However, "people **lacking self-control** will also tend to **pursue** immediate **pleasures <u>that are _not_ criminal</u>**. They will tend to <u>smoke, drink, use drugs, gamble, have children out of wedlock, and engage in illicit sex</u>" (Gottfredson and Hirschi 1990: 90).

Low self-control $\xrightarrow{\ +\ }$ Crime **or no** crime

Perhaps the authors mean that **other factors**, besides SC, influence crime. It is a **misunderstanding**, it is argued, that **"self-control is the 'sole cause of crime**' or that we argue that self-control 'completely explains all crime,' ideas clearly inconsistent with our presentation of the theory" (Gottfredson 2018: 349).

Low self-control **and other factors** $\xrightarrow{+}$ crime

What exactly these other factors are is not specified.

Note that the **informative content of SCT is low:**

> **„ … no specific act, type of crime, or form of deviance is uniquely required by the absence of self-control" (Gottfredson and Hirschi 1990: 91)**

Thus: whether purse snatching or a rampage (Amoklauf) occurs is left open.

Conclusion: SCT is a highly problematic theory: this holds for the definition of SC as well as for the variables the theory consists of.

A Comparison of Self-Control and Rational Choice Theory

Has self-control anything to do with costs and benefits?

Here is the definition of self-control again – low SC refers to the **inclination** to focus on:

- **immediate gratification of needs** (wants and desires -- whatever they may be), and on
- **ignoring the longer-term negative consequences of behavior.**

Self-control thus refers to a **benefit and a cost**: people **want to <u>get</u>** something (short-term benefits) and **want to <u>avoid</u>** something (long-term negative consequences = long-term costs).

„Inclination" means that the incentives (costs and benefits) and, thus, the behavior are more or less **stable over time**. Assumptions about these stabilities can be added as initial conditions, but are not laws.

Would RCT imply that people with these goals will commit crime?

To answer this question apply **value expectancy theory.**

Value Expectancy Theory (VET): a reminder

Action i

p probabilities
U utilities

Subjective
Expected
Utility

O=outcomes (beha-
vioral consequences)
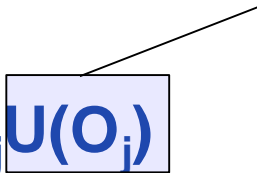
$$SEU(a_i) = \sum_{j=1}^{N} p_{ij}U(O_j)$$

j = number of
consequences

$$[SEU(a_i) > SEU(a_k)] \Rightarrow a_i$$

Question: Where are the short-term benefits (= **positive consequences**) and long-term costs (=**negative consequences**) in the definition of SEU?

Short-term positive utilities
Long-term negative utilities

$$SEU(a_i) = \sum_{j=1}^{N} p_{ij} \boxed{U(O_j)}$$

Thus: **only two utilities and outcomes** are considered and
everything else is missing in self-control theory:

The following is missing in SCT:

$$\text{SEU}(a_i) = \sum_{j=1}^{N} p_{ij} U(O_j)$$

- **(1)** the specification of the **behavior for which the consequences are relevant** is missing (the subscript "i".
  - If "**excitement**" is a valued behavioral consequence: VET would require to specify whether individuals think they get excitement by means of crime or by means of conformity;

- **(2) subjective probabilities and their magnitudes** are missing,

- **(3)** the **magnitude** of the utilities is not specified,

- **(4)** a **multiplicative effect** of utilities and probabilities is not addressed.

The equation for crime could be:

high p and U

(1) $SEU(Crime_c) = \mathbf{p_{ci}} \cdot \mathbf{U}(\text{Immediate easy benefits of crime}) + p_{cn} \cdot \mathbf{-U}(\text{Negative consequences of crime})$

low p

Thus: high likelihood of getting immediate benefits **through crime** and low likelihood of strong negative consequences generates a high SEU of crime.

Will VET imply that crime is likely in this situation?

No! Crime only occurs if the SEU for conformity is lower than for crime – see equation (2):

high p and U

Equation 1 again:

(1) SEU(Crime$_c$) = **p$_{ci}$** · **U**(Immediate easy benefits of crime) +
          p_{cn} · **-U**(Negative consequences of crime)

low p

low

(2) SEU(No crime$_n$) = p_{ni} · **U**(Immediate easy benefits of crime) +
+ p_{nn} · **-U**(Negative consequences of crime).

Conclusions: (1) These equations are the modified theory of self-control – with only two behavioral consequences.

(2) The equations describe the **scope conditions**: if (1) and (2) are given, then low self-control leads to crime.

When well confirmed theories are wrong …

Isn't all this rational choice theorizing pure fantasy?
SCT is well confirmed. Doesn't this prove its validity?

Philosophers of science emphasize that a **theory may be well confirmed, but fail if it is compared with other theories**.

Quantitative empirical researchers know this too: **a strong effect of some variables (e.g. low SC) may be totally explained by other variables (e.g. costs and benefits).**

Tibbetts and Myers (1999) provide a comparison of the impact of low SC and rational choice variables.

Their empirical study is about **test cheating of students –** the **dependent variable.**.

They measure **self-control** by using a popular **scale** by Grasmick et al. 1993.

Tibbetts and Myers further measure several **variables from a wide rational choice theory**: <u>anticipated shame</u>, <u>perceived pleasure of a behavior</u>, <u>morals</u>, and perceived formal and informal <u>sanctions</u>. Caught for cheating on previous exams is measured as well. Five control variables were included such as friends' cheating behavior and past test cheating

All other betas in this row are clearly smaller!

Low self-control becomes insignificant…

TABLE 3
Betas from Regressions of Intentions to Cheat on Low Self-Control and Independent Variables (N = 330)

Variable	Eq.1	Eq.2	Eq.3	Eq.4	Eq.5	Eq.6	Eq.7	Eq.8	Eq.9	Eq.10	Eq.11	Eq.12
Low self-control	.320	.121	.148	.086*	.125	.199	.176	.244	.232	.199	.208	.139
Gender		.293										
Morals			−.475									
Shame				−.518								
Pleasure					.447							
Sanctions						−.267						
Past year							.490					
Year in school								−.069*				
Caught									.193			
GPA										−.194		
High school											.286	
Friends' cheating												.469
R^2	.102	.116	.278	.307	.247	.131	.297	.067	.110	.097	.142	.270

* $p > .05$; one-tailed.

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TABLE 4
Results of Multivariate Regression Analysis Predicting Cheating Intentions (N = 330)

Variable	b	SE	B	t
Low self-control	.008	.013	.025	.644
Gender	.445	.231	.077	1.931*
Morals	−.273	.013	−.205	−4.595*
Shame	−.017	.004	−.199	−4.030*
Pleasure	.133	.042	.141	3.142*
Sanctions	.037	.125	.010	.293
Past year	.226	.034	.283	6.670*
Year in school	.061	.110	.026	.553
Caught	.073	.188	.063	.390
GPA	−.035	.107	−.011	−.325
High school	.490	.266	.074	1.846*
Friends' cheating	.166	.044	.166	3.782*

NOTE: R^2 = .56 and F = 34.03, $p < .001$.
* $p < .05$; one-tailed.

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This study is never cited by proponents of the theory !!!!!!

Conclusion

What is left from low self-control theory as an explanation of crime – from the perspective of RCT?
Perhaps some interesting ideas about possible incentives?

The research by Tibbetts and Mysers illustrates the procedure of how the program of Analytical Criminology should be implemented.

The study suggests:

Never trust the results of an isolated theory „test."

Final Notes

Perhaps **theory comparison** could be discussed as an ingredient **Analytical Sociology**, advanced by the **Akademie für Soziologie**? Severe theory tests are comparative theory tests!

This presentation was a **summary of a book**:

Analytical Criminology.
Integrating Explanations of Crime and Deviant Behavior

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