Classificatory and biolooping in biopsychosocial model of addiction

SSA Annual Symposium 2010
York, November 11-12, 2010
Anja Koski-Jännes
University of Tampere
Finland
” …Is addiction a choice, a self medicating behavior, a moral failing, a drug hijacked brain, a learned/conditioned behavior, an “addictor” induced dysregulation of the drive-reward system, or a genetically reward deficient nervous system crossing paths with a rewarding behavior or substance? …Some even deconstruct the concept, denying its status as a valid psychiatric (or other medical) category.”

Jcannavo, February 24, 2010
Goals of this presentation

- to increase integration between different disciplines studying addictive behaviours.

- to overcome the biology/culture and the realism/constructivism dualisms by focusing on the interaction between different levels of phenomena contributing to addictive behaviours.
Indifferent and interactive kinds
(Hacking 1999)

- Objects in the physical world are not aware of or altered simply by being classified as such (indifferent kinds)

- Objects in the social world are affected by the ways they are classified (interactive kinds)

- But this is not a one-way street!
  
  representations $\Leftrightarrow$ psychobiological aspects of addiction

- Psychopathologies as simultaneously both indifferent and interactive classes of phenomena (Hacking 2009, 154)
Drug use and society

- The results from the Epidemiological Catchment Area study by Robins & Regier (1991) display that...

- the likelihood of ever meeting the criteria for a drug abuse/dependence diagnosis was about fifteen times higher in the cohort born between 1952 and 1963 when compared to the cohort born between 1917 and 1936. (Heyman 2009, 33)

- The genetic and individual dispositions of Americans cannot have changed so radically between these two cohorts.

- So, the much higher prevalence of drug addiction in the later born generation must be due to societal and cultural changes affecting their mental and bodily processes.
Social representations (Moscovici 1961, 1981)

- folk beliefs or systems of belief about a common object.

- describe the ways in which a community of people try to make sense of new and threatening phenomena

- formed through communication by
  - anchoring it to a prevailing system of classifications
  - objectifying it with some form of concrete imagery.

- naturalization

Example: Heroin in Finland (Ylikangas 2009)
Use of medical heroin in Finland (Ylikangas 2009)

- Finland became one of the world’s highest consumers of medical heroin in the 1930’s
- The consumption was several times higher than in the total of all the other Nordic countries. For a while it was the highest in the world.
- Heroin was regarded as a cheap and effective remedy of many common ailments (cough, pain, tuberculosis).
- Despite the high consumption of medical heroin, morphine was about six times more common substance of abuse by the few drug addicts in Finland.
- Only 64 patients were treated for drug dependence in the Helsinki area mental hospitals from 1930-1939.
- The socio-cultural conditions of the thirties were apparently not ready for a real drug dependence epidemic to break out even though the availability of drugs was not a big problem
Classificatory and biolooping (Hacking, 1999)

- **Classificatory looping** – social classifications interact with the behaviors that have been classified - e.g. labeling changes the behavior of the labeled person

- **Biolooping** - the interaction effects between body and mind
Negative classificatory looping 1
Spiral of social deviance (Goldberg 1999)

- Society > individual > society

- Being labeled as deviant
  - Negative self-image
  - Secondary deviance
  - & conscious rule breaking
  - Cultural definition as a failure
Negative bioblocking 1

Drinker’s trap

Trap = self-perpetuating disturbance in aim directed activity

negative emotion

↓

search for a fast solution

positive expectations of effect

justifications

addictive behavior

physiological changes in the brain

short-term relief

long-term increase in negative emotion
Negative biolooping 2
Gambler’s trap

DREAMS OF A BETTER LIFE
   ↓
   PAYDAY
   ↓
"THIS TIME IT MUST SUCCEED"
   ↓
GAMBLING
   ↙
"BY CONTINUING I CAN WIN EVEN MORE"
   ↓
"BY CONTINUING I'LL WIN BACK WHAT I LOST" (CHASING)
   ↙
PROBABLE RESULT: LOSS & INCREASE IN NEGATIVE EMOTION
   ↓
Related neurophysiological changes
Changing social representations of smoking

- Previous social representation
  - Classification: a luxury or enjoyment product
  - Imagery: Power, freedom, independence, intelligence

- Current social representation
  - Classification: addictive and poisonous substance, restricted by law
  - Imagery: Weakness of character, lack of responsibility, disease

=> Consequences:
  - increasing legal restrictions
  - Large numbers have quit smoking
  - guilt, rationalizations and defenses in the persistent smokers
  => dependence may grow stronger in this minority
Other examples of positive looping effects

Changing identity definitions of addicts

Adopting the identity of a helper instead of someone capable only of receiving help in self-help groups increases the probability of abstinence (Pagano et al 2004) => helping others aids the person also in solving his/her own existential problems.
What is needed

- Ways to prevent and intervene in negative classificatory looping and biolooping processes that aid in producing excessive appetites

- Ways to produce positive classificatory and biolooping supporting recovery

- Integration of social, psychological and biological views on addiction since addiction is a truly interactive and changeable process.
Main references