Psychiatria Danubina, 2014; Vol. 26, No. 4, pp 368-371 *Conference paper*

HOW ADDICTION DEVELOPS AND WHAT ARE THE CONSEQUENCES – A PSYCHODYNAMIC APPROACH
Addiction and psychodynamic aspects

WIE ENTSTEHT SUCHT UND WAS SIND DIE FOLGEN - EINE PSYCHODYNAMISCHE BETRACHTUNG
Sucht und psychodynamische Aspekte

Gerhard Schüßler

Department of Medical Psychology, Medical University of Innsbruck, Innsbruck, Austria

SUMMARY

Background: *The reward-system can be differentiated from the motivational system.*

Methods and results: *A complex psychodynamic approach (OPD-2) takes into account motivational aspects – psychological functioning – the drug and the consequences. Multiaxial aspects are necessary. The system is described.*

Conclusions: *A psychodynamic cycle of addiction enables different therapy steps.*

Key words: *addiction – operationalized psychodynamic diagnosis - therapy*

ZUSAMMENFASSUNG

Hintergrund: *Das Belohnungssystem wird vom Motivationssystem unterschieden.*

Methoden und Resultate: *Ein komplexer psychodynamischer Ansatz (OPD-2) berücksichtigt Motivationsaspekte – psychologisches Funktionieren - Drogen und die Konsequenzen. Multiaxiale Aspekte sind notwendig. Das System wird beschrieben.*

Conclusio: *Ein psychodynamischer Suchtkreislauf ermöglicht verschiedene Therapieschritte.*

Schlüsselwörter: *Sucht – operationalisierte psychodynamische Diagnose - Therapie*

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INTRODUCTION – WANTING AND LIKING

Affect, the hedonic quality of pleasure or displeasure, is what distinguishes emotion from other psychological processes.

Emotions move and reign us, they are the basis of motivation. The (dis-)satisfaction of bodily needs such as tiredness, hunger, thirst, sexuality et al. but also other affects (such as e.g. rage) create hedonic pleasure or displeasure, but however not for a long time.

Emotional experience, which is repeated, creates learning; important events can be imprinted fast.

Emotions are directed to pleasure/displeasure, gain or loss, success or failure. Negative emotions (pain, anxiety) are the beginning of displeasure, positive emotions (joy, happiness, well-being) are the beginning of pleasure. The goal to gain pleasure and the avoidance of (or setting an end to) displeasure is what drives and motivates people.

Neurobiologically important transmitters are the endogenous opiates and dopamine which are produced and released in the "reward system".

This system and its encodings are mainly constituted by the anteriortegmental area, the dorsal and ventral striatum and the nucleus accumbens, connected with the cingulate and orbitofrontal cortex. The activity of the reward system (pleasure/displeasure) is the end point of motivation (to gain reward). The higher the reward the higher is the neuronal activation. The neurotransmitter dopamine is more active in the "wanting system" (Berridge 2007), opioids act more in the pleasure/displeasure system.

Reward and pleasure are the „liking system", the motivational system is providing events and behaviors ("wanting system") to gain pleasure.

Reward involves multiple neuropsychological components together: first, the hedonic affect of pleasure itself ("liking"); second, motivation to obtain the reward ("wanting" or incentive salience); and third, reward-related learning (Berridge & Kringelbach 2013) (Figure 1).

Addiction enhances the function of the reward circuitry of the brain (producing the 'high' that the drug user seeks). The core reward circuitry consists of an 'in-series' circuit linking the ventral tegmental area, nucleus accumbens and ventral pallidum via the medial forebrain bundle. The 'second-stage' dopaminergic component in this reward circuitry is the crucial addictive-drug-sensitive component. All addictive drugs (and behaviors) have in common that they enhance (directly or indirectly or even transsynaptically) dopaminergic reward synaptic function in the nucleus accumbens. Drug addiction progresses from occasional recreational use to impulsive use to habitual compulsive use. This correlates with a progression from reward-driven to habit-driven drug-seeking behavior.

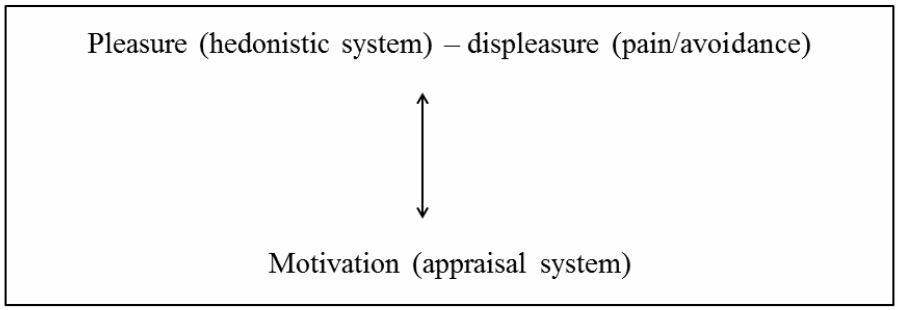

Figure 1. Differentiation of „liking“ and „wanting“

"Wanting" and "liking" are highly individual. Psychodynamic motivation means to look for the individual bio-psycho-social circle of addiction in which a specific substance is related to a specific behavior and creates an individual addiction. Therefore the psychodynamic question is not only what causes pleasure/displeasure ("liking"), but which motivation and psychosocial functioning lead to "wanting".

Every drug or behavior (e.g. gambling) has a special effect which interacts with the individual coping, motivation and psychological function – creating an individual person x drug interaction. The different psychodynamic models can be summarized in six main points:

- Satisfaction of motives (e.g. alcohol enables the person to seek social/sexual contacts, cocaine enhances the narcissistic feeling et al.);
- Lack of impulse-regulation;
- Lack of capacity to mentalize and tolerate/regulate emotions;
- "Self-medication" to regulate/avoid situations and feelings (e.g. pain, loneliness);
- Reduced capacity for self-care;
- For all addicted persons: the denial of the addiction has its psychological and somatic consequences – increasing with the rising of the addiction.

The central psychodynamic statement is: addictive consumption serves its purpose for motives and psychological functions – different according to individual personalities. In the course the addiction has psychological and somatic consequences especially in the realm of motives and psychological functions, therefore a multidimensional and longitudinal approach is necessary. For the planning of the therapeutic options it is important to define in which situation/at which point the addicted stays.

OPERATIONALIZED PSYCHODYNAMIC DIAGNOSIS (OPD-2)

From the start 20 years ago, the OPD Task Force has developed multiaxial psychodynamic diagnosis based on 5 Axis to fulfil the multidimensional and complex interpersonal, motivational and functional mental phenomenon and disorders (OPD Task force 2008). The 5 Axis are named as: "experiences of illness and prerequisites for treatment" (Axis I), "interpersonal relations" (Axis II), "conflict and motivation" (Axis III), "psychic function and structure" (Axis IV) and "mental and psychosomatic disorders according to the ICD-10" (Axis V). In every Axis the psychodynamic clinical aspects are operationalized e.g. in the motivational conflict field self-worth (Table 1).

Psychic function is described in several domains: reality control, self-control, communication, capacity tolerate, bonding, impulse control et al. In table 2 the operationalization of impulse control is given.

Table 1. Operationalization of self-worth conflict (motivation)

Self-worth	
The conflicts here refer to self-worth versus object worth as the non-adaptive extreme poles of the theme "being able to question oneself" and "to attach a value to oneself"	
Passive mode	Active mode
When the passive mode predominates, the patient experiences a critical dip in the feeling of self-worth („I am nothing any more")	When the active mode predominates, there is a forceful self-assuredness in the patient towards others as an attempt to cope with a feared or real crisis of self-worth.
Job/professional life	
In their jobs, these patients show great work and achievement motivation to compensate for hurts and usually have quite some success within the framework of their possibilities.	

Table 2. Operationalization of self-regulation (function - structure)

Self-regulation — impulse control	
Moderate level of integration	Low level of integration
Impulses are inhibited by over-regulation, occasionally breaking through, nevertheless. The self is experienced as blocked, or under great pressure. The overly strong super ego is either strongly critical or selectively cut out.	Impulses are not well-integrated, cannot be postponed (under-regulation) or be absorbed by a differentiated value system that guides one's actions. Aggressive tendencies lead to self-destructive acts and destructive acts directed to others. The lack of relationships my be sexualized; perverse solutions.

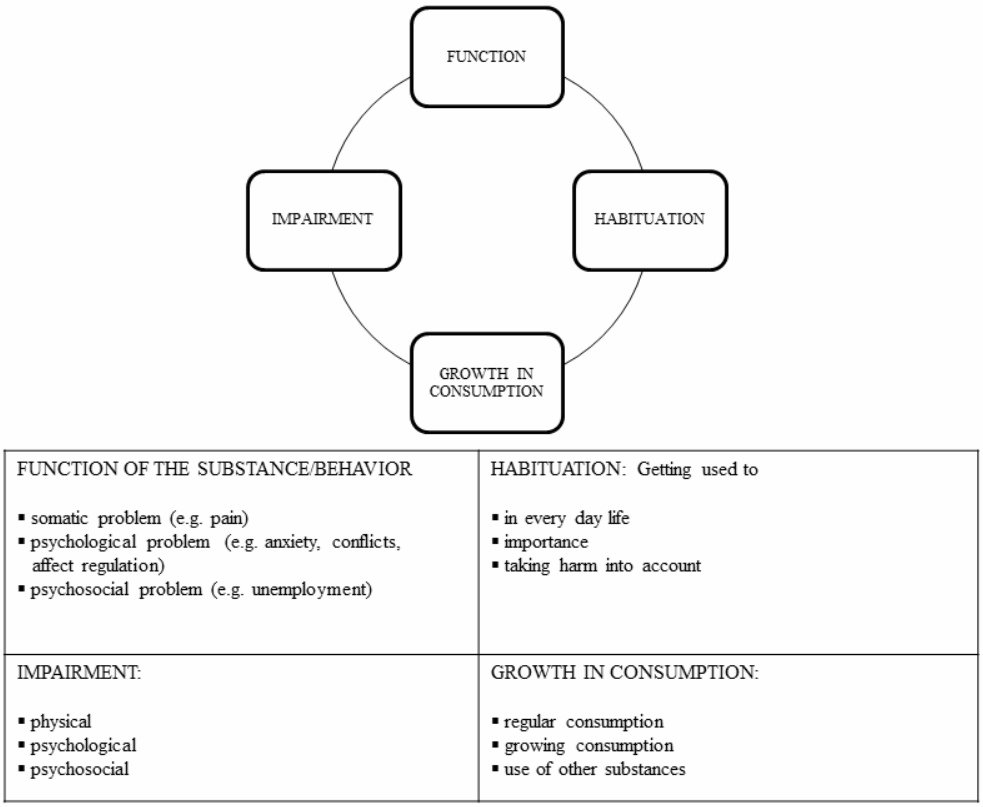

Figure 2. Cycle of addiction

Concerning the Axis 1 – Experience of Illness and Prerequisites for Treatment, several items are specially defined and related to addictions:

- Nature and severity of the existing addiction and substance;
- Duration of the problem;
- Patient concept about change;
- Subjective acceptance of disorder;
- Treatment goal of the institutional team: total abstinence or modification;
- Acceptance of treatment goal;
- Resources for change;
- Openness;
- Social and rehabilitated restrictions;
- Legal restrictions;
- Impediments to change;
- Addictions and family of origin or relations.

This multiaxial information is now evaluated in the circle of addiction, concerning (Table 3).

Table 3. Aspects

Aspect „function“ Consumption has the psychodynamic function to stabilize/enhance self-worth (conflict) or to stabilize affect regulation (structure function).
Aspect „habituation“ Substance (behavior) stabilizes/enhances self-worth, without substance „nothing goes“.
Aspect „growth in consumption“ The regular/higher doses brings about social withdrawal → enhances self-worth problems → enhances consumption → reduces affect regulation
Aspect „impairment" The longstanding consumption further reduces social contacts and affect regulation; first physical problems

This circle of addiction depicts the course and dynamics of addictive disorders and enables to differentiate

every problem in the course of the disorder. This compensation of impairments has a secondary function (primary is the original motivational-functional compensation). These two processes develop a momentum of its own (Figure 2).

This acceptance and integration of addictions have been operationalized in 3 major steps. It starts with a denial of the addiction (with or without the denial of the concurrent problems). The next step is the acceptance of the addiction (with or without expiring this as a burden) and the last step is the beginning and advanced working through of the addictive disorder (Arbeitskreis OPD-2 Modul Abhängigkeitserkrankungen 2013).

ASSESSMENT AND PLANNING THERAPY

Every operationalized assessment of the bio-psycho-social beginning and development of an addictive disorder follows the rules of every operationalized assessment (e.g. ICD-10): To get a better real ability the specialist/rater has to be trained to fulfil the operationalized criteria. This is even more true for the OPD, because it's a multidimensional complex instrument, not only for looking at symptoms but also at conflicts and psychic functions. This complex diagnostic procedure enables a complex and individual therapy plan defining the focus of the treatment:

- if the patient sticks in the denial phase a motivational treatment is the therapy of choice (Prochaska & DiClemente 1982);
- if the patient is accepting his addiction it is possible to work through the motivational and functional problems which induced the addictive disorder or
- if the patient is in the phase of working through new ways of being without can be experienced.

Acknowledgements: None.

Conflict of interest : None to declare.

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Correspondence:
Univ. Prof. Dr. Gerhard Schüßler
Director Department of Medical Psychology, Medical University of Innsbruck
Schöpfstraße 23a, 6020 Innsbruck, Austria
E-mail: g.schuessler@i-med.ac.at