Consumption and Dependence: Inextricable Link or Cultural/Subjective Connection?

Stanton Peele

Presentation at Kettil Bruun Society Meeting at Skarpö, Stockholm, on Measurement of Drinking Patterns and Problems
What is addiction?

- Inexorable physiological process
  - leaves out so much
  - doesn't explain use of heroin
  - so much of addictive behavior common
What is addiction?

• Meaning of Addiction (Peele 1985/1998)
  – experiential model of addiction
  – individual and social interpretation
  – psychic/physical dependence split illogical
Consumption $\Rightarrow$ Dependence

• Limits of Consumption Models (Peele, 1987)
  – misapplication of pharmacological model
Consumption $\Rightarrow$ Dependence

- Room (1987) Response:

"As dependence concepts shift to... physiological aspects, they become... another name for sustained heavy alcohol use."
Consumption $\Rightarrow$ Dependence

• Studies:

"The greater the craving of the addict and the severity of the withdrawal symptoms the better are the chances of substituting a hypodermic injection of sterile water"

(Light & Torrance, 1929)
Clinical Controlled Drinking

• The Context
  – war on controlled drinking
  – British studies of mid-1980s
Clinical Controlled Drinking

• **Outcome Studies**
  – Heather, Rollnick, and Winton (1983) – SADQ v. CD beliefs
  – Miller et al. (1992) – severity + views + goals
Clinical Controlled Drinking

• Quasi-Experimental / Choice Studies
  – Elal-Lawrence, Slade, and Dewey (1986)
  – Orford and Keddie (1986)
  – subjective dependence $\Rightarrow$ objective dependence
Conclusion: CD Research

- **Expectations/Experience**
  - in the context of choice
  - more important than dependence
Conclusion: CD Research

• **Sample Qs (Heather et al., 1983):**
  - Do you have a drinking problem?
  - Are you "hooked" on alcohol?
  - Do you believe, one drink/one drunk?
  - Can you control your drinking?
  - Have you controlled your drinking?
  - Have you attended AA?
Epidemiology

• Problem Drinking Among American Men
  – "symptomatic drinking –
  – physiological consequences of heavy drinking"
  – *not* more consistent than loss-of-control
  – highest $r$ with "psychic dependence" (.41)
  – higher than with heavy intake ($r = .34$)
  – *preceded* heavy intake in 68 percent of cases
Epidemiology

• Dawson (2000) on Dependence
  – Life and death
    • dependent light/moderate drinkers have no advantage over abstainers
    • nondependent heavy/very heavy drinkers not worse off than abstainers
    • consumption-dependence related but not exhaustive (NLAES)
NAS: Measuring Dependence 1967-1984

- Tangible Consequences (Social Problems)
- 4 Dependence Symptoms
  - skipping meals while drinking
  - waking up in the morning after [drinking] unable to remember the night before
  - having been unable to stop drinking until intoxicated
  - having stayed drunk or high for more than a day at a time
NAS: Measuring Dependence
1984-1995 13 Symptoms

• Withdrawal
  – I have often taken a strong drink the first thing... in the morning
  – my hands shook a lot the morning after drinking
  – sometimes I awakened during the night… sweating all over...
NAS: Measuring Dependence
1984-1995 13 Symptoms

• Tolerance
  – I needed more alcohol than I used to, to get the same effect as before

• Craving
  – sometimes I have needed a drink so badly that I couldn’t think of anything else

• 3+ symptoms the prior year
ARG National Alcohol Surveys
Heavey Drinking & Dependence

- Room (1989)

<table>
<thead>
<tr>
<th></th>
<th>1967-1984</th>
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</thead>
<tbody>
<tr>
<td>5+ drinks / weekly</td>
<td>+25%</td>
</tr>
<tr>
<td>dependence symptom</td>
<td>+114%</td>
</tr>
<tr>
<td>tangible consequence</td>
<td>+33%</td>
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ARG National Alcohol Surveys
Heavey Drinking & Dependence


<table>
<thead>
<tr>
<th></th>
<th>1984-1990</th>
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</thead>
<tbody>
<tr>
<td>Total</td>
<td>5+ drinks/weekly</td>
</tr>
<tr>
<td></td>
<td>3+ symptoms</td>
</tr>
<tr>
<td>18-29</td>
<td>5+ drinks/weekly</td>
</tr>
<tr>
<td></td>
<td>3+ symptoms</td>
</tr>
<tr>
<td>Unemployed</td>
<td>5+ drinks/weekly</td>
</tr>
<tr>
<td></td>
<td>3+ symptoms</td>
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</table>
NAS:
Heavy Drinking ⇒ Dependence

• Trends in Heavy Drinking
  – leveling off
  – dependence increasing
  – especially among some groups
Models of Heavy Drinking $\Rightarrow$ Dependence

• Hilton (1991)

<table>
<thead>
<tr>
<th>Demographic Categories</th>
<th>Moderate Dependence</th>
<th>High Dependence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 18-29</td>
<td>29</td>
<td>19</td>
</tr>
<tr>
<td>Age 50-59</td>
<td>19</td>
<td>7</td>
</tr>
<tr>
<td>Married</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>Single</td>
<td>32</td>
<td>22</td>
</tr>
<tr>
<td>Not HS Grad</td>
<td>27</td>
<td>15</td>
</tr>
<tr>
<td>College Grad</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>$\leq$ $10,000$</td>
<td>38</td>
<td>28</td>
</tr>
<tr>
<td>$&gt; 40,000$</td>
<td>11</td>
<td>8</td>
</tr>
</tbody>
</table>
Models of Heavy Drinking $\Rightarrow$ Dependence

- Harford et al. (1991)

<table>
<thead>
<tr>
<th>Frequency of Intoxication</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\leq$ 2/year</td>
<td>16</td>
</tr>
<tr>
<td>3-11/year</td>
<td>21</td>
</tr>
<tr>
<td>1-3/month</td>
<td>24</td>
</tr>
<tr>
<td>1-2+/week</td>
<td>39</td>
</tr>
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</table>
Models of Heavy Drinking ⇒ Dependence

• **Consumption x Age**
  
  – For twenty year olds, the risk for dependence is estimated to increase by 0.51 for each additional ounce of ethanol consumed daily while the corresponding increase in risk is 0.19 for sixty year olds.
WHO/NIH Cross-Cultural Applicability Project

• Schmidt, Room, et al. (1999)
  – Key Informants
  – Nine Sites
  – Predict: Physical symptoms vary less by culture
  – Found: Cultural applicability is as problematic for them as for psychological symptoms
WHO/NIH Cross-Cultural Applicability Project

"even though physical dependence criteria involve more objective, observable phenomena, cultural applicability is as problematic for them as for the psychological symptoms"

As a result, diagnostic criteria for dependence "do not easily cross particular kinds of cultural boundaries."
Is This New Information?

• Peele (1987):
  – "Cross-cultural research defies the idea that dependence or addiction is the natural consequence of overimbibing."
Is This New Information?

• Peele (1987):
  - "The most remarkable evidence for this is Heath's (1958) investigation of the Bolivian Camba, a group with among the highest recorded rates of alcohol consumption in the world."
Is This New Information?

• Peele (1987):
  - "People in this culture drink a beverage containing 89% alcohol. Although the drinkers typically blacked out, Heath observed no cases of antisocial aggression, alcohol withdrawal, solitary drinking or job problems due to drinking."
Is This New Information?

- Peele (1987):
  "Thus it appears that alcohol dependence is not a syndrome that can be removed from a cultural context."
Conclusions

• **Individual clinical measurements**
  – belief in loss of control models
  – accept relevance to themselves

• **Understanding social group differences**
  – social resources
  – drinking experiences
  – belief in addictive models
  – belief/experience of efficacy
Conclusions

• Cultural Differences
  – view of the nature of drinking experiences
  – definitions of addiction
  – existence and likelihood of loss-of-control
A Theory of Addictive Knowledge

• "To say that overdrinking creates dependence—rather than comprising some objective description of the nature of addiction—is to describe a particular societal drinking milieu."

(Peele, 1987)
A Theory of Addictive Knowledge

• "Addiction, at its extreme, is an overwhelming pathological involvement. The object of addiction is the addicted person's experience of the combined physical, emotional, and environmental elements that make up the involvement for that person. Addiction is often characterized by a traumatic withdrawal reaction to the deprivation of this state or experience. Tolerance—or the increasingly high level of need for the experience—and craving are measured by how willing the person is to sacrifice other rewards or sources of well-being in life to the pursuit of the involvement"

(The Meaning of Addiction, p. 26).
References


eight, A.B., and Torrance, E.G. (1929). Opiate addiction VI: The effects of abrupt withdrawal followed by readministration of morphine in human addicts, with special reference to the composition of the blood, the circulation and the metabolism. Archives of Internal Medicine, 44, 1-16.


