READINESS FOR CHANGE AND READINESS FOR HELP-SEEKING: A COMPOSITE ASSESSMENT OF CLIENT MOTIVATION

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Abstract — Aims: To investigate the correspondence between readiness for behaviour change in general and readiness for alcohol related help-seeking in particular. A related aim was to examine how, if at all, measures of dependence severity, use, and consequences were related to a composite measure depicting agreements and disagreements between general change readiness and help-seeking readiness. Methods: Non-treatment seeking alcohol-dependent patients, numbering 549, from general hospitals in Germany were interviewed. Results: When taking into account both dimensions of motivation, findings indicate 42% of the subjects were characterized by different motivation levels regarding readiness for change and readiness for help-seeking. Higher help-seeking readiness was associated with higher alcohol problem severity. Readiness to change was not affected by alcohol problem severity. Conclusions: Findings underscore the need to evaluate both motivational constructs in determining clients’ need and receptivity to formal help.

INTRODUCTION

Readiness for change is an important consideration in treatment planning (Finney, 2003), and readiness for change is a strong predictor of later drinking reduction (Project MATCH Research Group, 1997, 1998). Not surprising, then, several psychosocial interventions specifically focus upon mobilizing and sustaining client readiness for change, and findings indicate that these interventions are effective across diverse clinical settings with different populations of alcohol and illicit drug abusers (Miller et al., 2003; Project MATCH Research Group, 1997, 1998).

Researchers have sought to refine the understanding of motivation and its implications for treatment assignment. Often people ready to change their drinking refuse to seek formal help because they intend to quit their drinking by themselves. Previous studies have shown that many people with alcohol problems in the past have overcome their problems without formal help (Sobell et al., 1996). People in treatment are not always motivated to change; they may, however, be coerced to receive treatment by courts or employers (Blanchard et al., 2003). Freyer et al. (2004) demonstrated that readiness to change drinking and readiness for alcohol treatment—both based upon the transtheoretical model of intentional behaviour change (TTM, Prochaska and DiClemente, 1984; Prochaska and Velicer, 1997)—were distinct, albeit positively correlated measurement constructs among high-risk drinkers in Germany. Parallel scale scores derived from the readiness to change questionnaire (RCQ, Rollnick et al., 1992) and the treatment readiness tool (TReaT, Freyer et al., 2004) shared relatively little variance [7% (contemplation scores), 13% (precontemplation scores), and 19% (TReaT-preparation and RCQ-action scores)]. Each construct provided unique and potentially important information necessary for tailoring intervention strategies to correspond to client needs, strengths, and aspirations.

The aim of this study was to develop a composite index of change readiness that took into account both readiness for change in general and readiness for help-seeking in particular. Simultaneously considering the change readiness constructs offers several advantages. Foremost, the identification of discrepancies between responses on measures of the two constructs may reduce the occurrence of false negatives (or positives) provided when using one measure of change readiness only, e.g. low readiness for change but high readiness for treatment or high change readiness but low readiness for help-seeking. Alternatively, the identification of concordance between measures of change readiness and for treatment offers higher reliability and confidence in tailoring interventions intended to mobilize and/or sustain motivation to reduce/quit drinking.

A related study aim was to investigate the associations between measures of alcohol dependence, consequences, and use and the developed composite assessment of change readiness. Two predictions were tested in this regard: (i) concordance of low readiness on both constructs of motivation would be associated with lower alcohol severity, and (ii) concordance of high readiness on both motivation measures would be associated with higher alcohol problem severity. No predictions were made about alcohol involvement when discrepancies occurred between the two motivational constructs.

METHODS

Sample

Data for this assessment study was collected as part of the intervention study ‘Early Intervention in General Hospitals’ (conducted by the Research Collaboration on Early Substance Use Intervention, EARLINT). Between 28 April 2002 and 30 June 2004 all consecutive hospital admissions in the units of internal and surgical medicine from four general hospitals...
in Northeastern Germany were asked to consent to an alcohol screening to identify high-risk drinkers and individuals with alcohol abuse and alcohol dependence. The inclusion criteria being individuals between 18–64 years old and a minimum hospital stay of 24 h. Patients not cognitively and physically capable, patients already recruited for the study during an earlier hospital stay, patients with language barriers, and patients employed at the hospital were excluded from the study. Study participation was voluntary.

A total of 17,272 patients were eligible for the parent study. For 83.0% of these (N = 14,332), informed consent for study participation was obtained. The alcohol use disorder identification test (AUDIT, Saunders et al., 1993) and the Lübeck alcohol screening test (LAST, Rumpf et al., 1997) with cutoff values of eight and two points, respectively, were used. For 20.4% (n = 2,924) of the participants, a positive screening result was identified in at least one of the two measures. Of these, 79.9% (n = 2,337) agreed to participate in the German adaptation of the computerized composite international diagnostic interview (M-CIDI, Lachner et al., 1988; Wittchen and Pfister, 1997). Using the M-CIDI, 25.6% of the participants (n = 599) received the DSM-IV (American Psychiatric Association, 1995) diagnosis alcohol dependence, 6.8% (n = 159) received the diagnosis alcohol abuse, and 19.1% (n = 159) met criteria for alcohol dependence in the past but not in the past 12 months. Using the quantity-frequency-index of the M-CIDI, 22.7% (n = 531) were classified as high-risk drinkers. The remaining 25.8% (n = 602) did not meet criteria of dependence, abuse, or high-risk-drinking and were classified as false-positives.

Of the individuals with positive scores in the initially screened sample, 21.1% were not included for the following reasons: left the hospital and were lost (n = 251), refused to continue participation (n = 238), died or required intensive medical services (n = 24), other reasons (e.g. physician refused participation, n = 7). Reasons for not participating could not be determined for 67 patients.

In this assessment study, only the sub-sample of the currently alcohol-dependent participants was included. Twenty-eight of these dropped out from further study participation, leaving a total of 571 alcohol-dependent participants to respond to the interview that followed.

Assessments

The entirely computerized interview contained alcohol related self-report measures. The RCQ (Rollnick et al., 1992) was used to assess readiness to change. It was developed as a short measure of general stages of change. It consists of 12 items, four for each scale representing: precontemplation (RCQ-PC, e.g. drinking less alcohol would be pointless for me), contemplation (RCQ-C, e.g. my drinking is a problem sometimes) and action (RCQ-AC, e.g. I am trying to drink less than I used to). The 5-point-Likert-scale ranges from ‘strongly disagree’ (–2) to ‘strongly agree’ (2). The quick-method of the RCQ permits assignment to one stage of behaviour change (precontemplation, contemplation, and action) based on the highest scale score. In the case of ties, individuals get allocated to the higher motivational stage.

The TReaT (Freyer et al., 2004) was used to assess readiness to seek formal help. The TReaT is a short, reliable, and valid measure, based on the stages of change model by Prochaska and DiClemente (1984) and Prochaska and Velicer (1997). It has 12 items, four for each readiness scale: precontemplation (TReaT-PC, e.g. I do not think that other people can help me), contemplation (TReaT-C, e.g. I eventually may want help but not now), and preparation (TReaT-P, e.g. I have decided to seek appropriate treatment). The instruction refers to formal help for alcohol-related problems (including both, professional treatment and self-help groups) on a dichotomous item response scale (true/not true). The TReaT scales have high internal consistencies (Cronbach’s alpha), ranging between r = 0.80 (TReaT-C) and 0.95 (TReaT-P); and relatively high item–total correlations within each scale, ranging between r = 0.53 and r = 0.89. Fit indices of CFI = 0.94 and SRMR = 0.07 indicate adequate construct validity.

Three measures were used to depict alcohol involvement: The severity scale of alcohol dependence (SESA, John et al., 2003) was used to measure severity of dependence. The SESA is a valid self-report instrument that consists of 28 items and seven scales covering the criteria of the alcohol dependence syndrome. The instruction refers to the last drinking episode. Four scales (narrowing of drinking repertoire, somatic withdrawal symptoms, drinking to avoid withdrawal, psychological withdrawal symptoms) use a 5-point-Likert-scale (never–daily) and three scales (increase of tolerance, extreme increase of tolerance, decrease of tolerance) use a dichotomous response scale (yes/no). For this study the total score was used, with a maximum score of 100. The adverse consequences from drinking questionnaire (ACD, Moos et al., 1985) was used to assess negative social and legal consequences from drinking in the past 6 months. The ACD spans nine consequence domains (e.g. driving under the influence, problems at work), and uses a 5-point-Likert-scale (never [0]–frequently [4]), with a maximum score of 36. The total score of the screening measure AUDIT (Saunders et al., 1993) provided information on drinking behaviour, adverse psychological reactions, and alcohol-related problems in the past 12 months, with a maximum score of 40.

Allocation to stage of treatment readiness (TReaT)

The primary aim of this study required to create stage allocation rules for the TReaT. In conformity with the quick-method of the RCQ, participants were allocated based on their highest scale score. The quick-method was adopted to avoid disagreements caused by different allocation rules rather than true differences on the motivation measures. In the case of between-scale ties participants were allocated to the one further along on the motivational process. Additional to the quick-method, in the case of zero-scores on all three scales participants were allocated to precontemplation.

RESULTS

Of the 571 alcohol-dependent subjects, 22 subjects were deleted from this assessment study due to missing values in the TReaT or the RCQ, leaving a total sample of 549 subjects. The mean age of the sample was 40.00 years (SD = 11.34), the majority was male (92.0%, n = 505), and half of the sample did not have a partner (51.8%, n = 271). Forty-three percent...
separately, of patient motivation relative to the two measures considered. The assessment of motivation offers a radically different summary.

Table 1. Cross correlations between the subscales of the TReaT and the RCQ

<table>
<thead>
<tr>
<th>Scales</th>
<th>RCQ-PC</th>
<th>RCQ-C</th>
<th>RCQ-AC</th>
</tr>
</thead>
<tbody>
<tr>
<td>TReaT-PC</td>
<td>0.39***</td>
<td>-0.30***</td>
<td>-0.27***</td>
</tr>
<tr>
<td>TReaT-C</td>
<td>-0.03</td>
<td>0.13**</td>
<td>-0.06</td>
</tr>
<tr>
<td>TReaT-P</td>
<td>-0.45***</td>
<td>0.44***</td>
<td>0.40***</td>
</tr>
</tbody>
</table>

PC, precontemplation; C, contemplation; P, preparation; AC, action. ***P<0.001, **P<0.01, correlations of parallel scale scores are bold.

(n = 238) had <10 years of school, and 47.7% (n = 262) were unemployed. The mean scores for alcohol relevant measures were as follows: M_{AUDIT} = 19.24 (SD = 8.02, n = 532), M_{SESA} = 33.07 (SD = 22.68, n = 530), and M_{ACD} = 3.32 (SD = 3.79, n = 547). Subjects with missing values in these measures were deleted case-wise.

Finally, the TReaT scales were correlated with parallel scale scores of the RCQ. As expected, all correlations were positive and significant, but relatively small, r_{PC,PC} = 0.39, r_{CC} = 0.13, r_{PC,AC} = 0.40. Since the preparation stage is located between contemplation and action, the correlation between TReaT-preparation and RCQ-contemplation was also positive and significant, r_{PC,C} = 0.44 (Table 1).

Stage allocation
The TReaT assigned 171 (31.1%) participants to precontemplation (PC), 155 (28.2%) to contemplation (C), and 223 (40.6%) to preparation (P). The number of subjects with tied scale scores was 92 (16.8%). Nine subjects had the same scale scores on all three scales (6x PC = C = P = 4; 2x PC = C = P = 0; 1x PC = C = P = 2). Eighty-three subjects scored equally high on two scales (50x PC = C; 4x PC = P; 29x C = P).

The RCQ assigned 69 (12.6%) participants to precontemplation, 268 (48.8%) to contemplation, and 212 (38.6%) to action (AC). The number of subjects with tied scale scores was 75 (13.7%). Two subjects had the same scale scores on all three scales and 73 subjects scored equally high on two scales (4x PC = C; 1x PC = AC; 68x C = AC).

A composite assessment
Participants were assigned to one of four change readiness groups based on their responses to the TReaT and RCQ: (i) not ready for change and help-seeking, (ii) ready for change only, (iii) ready for help-seeking only, and (iv) ready for change and help-seeking. For both measures, participants in precontemplation and contemplation were allocated to the category ‘not ready’, participants in preparation/action, were allocated to ‘ready’. Displayed in Table 2, the composite assessment of motivation offers a radically different summary of patient motivation relative to the two measures considered separately, κ = 0.12, P < 0.05. In particular, the RCQ placed 212 of the subjects into the ready to change drinking behaviour group, but only 102 (48.1%) of these subjects reported readiness for help-seeking. Alternatively, the RCQ classified 121 subjects (22.0%) as lacking motivation to change drinking while these same subjects reported high readiness for alcohol related help-seeking.

We tested whether subjects on the boundary (those with tied scale scores between contemplation and preparation that got classified as ‘ready’) contributed to the disagreement between the stage measures. When omitting all 149 subjects with tied scale scores from analyses, cell distribution (45.5%, 17.0%, 25.0%, 12.5%) and (κ = 0.06, P = 0.19) did not change to the better, indicating that disagreements were not caused by tied scale scores.

Motivation and alcohol involvement
To test for interaction effects between the three measures of alcohol involvement (AUDIT, ACD, SESA) and group affiliation, a profile analysis of repeated measures was used. In contrast to the more commonly used profile analysis, where there is one dependent variable (DV) measured at several different times, the type of profile analysis used here, tests a set of several different DVs, all measured at one time. According to Tabachnik and Fidell (2001), it compares profiles of two or more groups measured on different scales. It asks if the groups (independent variable, IV) have the same pattern of means on the scales (DV). The profile analysis tests for (i) differences in levels (Does one group, on average score higher on the measures than another?), (ii) parallelism (Do the groups have parallel profiles?), and (iii) flatness (Do all the DVs elicit the same average response?).

Through General Linear Modelling a 3 (measures of alcohol involvement) × 4 (motivational groups) profile analysis of repeated measures was conducted; with the three measures of alcohol involvement being the DVs and group affiliation being the four-level IV. Significant results were obtained for all three tests. Shown in Table 2, there were groups that.

![Fig. 1. Interaction between motivational groups and alcohol problem severity measures.](https://example.com/f1.png)
scored higher on all three measures than others, $F(3, 508) = 38.37$, $P < 0.001$. The groups did not have parallel profiles [$F(6, 1014) = 15.67$, $P < 0.001$] and the DVs did not elicit the same average response [$F(2, 507) = 1328.79$, $P < 0.001$].

To identify which groups differed from which groups, three ANOVAs (one for each measure of alcohol involvement) with Tukey post hoc analyses were conducted. Medium to large effects were obtained. Both ‘ready for help-seeking’-groups compared to both ‘not ready for help-seeking’-groups had higher scores on the AUDIT [$F(3, 543) = 31.60$, $P < 0.001$, $f = 0.39$] and the SESA [$F(3, 526) = 33.89$, $P < 0.001$, $f = 0.40$]. Furthermore, both ‘ready for help-seeking’ groups reported more negative consequences from drinking compared to those ‘ready for change only’ [$F(3, 543) = 13.82$, $P < 0.001$, $f = 0.27$].

To test for demographic differences among the four motivational groups, one test each of ANOVA and chi-square-difference were conducted (Table 3). Those ‘not ready for change and help-seeking’ were younger compared to the other groups. There were more women in both ‘ready for help-seeking’ groups than in both ‘not ready for help-seeking’ groups. Having a partner increased the chance of being ‘ready for change only’. Being unemployed increased the chance of being ‘ready for help-seeking only’.

**DISCUSSION**

Findings provide a new view on motivation by jointly considering readiness for change and readiness for help-seeking. Among a non-treatment seeking alcohol-dependent sample we found a large proportion of disagreements when only evaluating one motivational construct and neglecting the other. One could argue that subjects on the boundary might contribute to the disagreement between the stage measures. That, however, was not confirmed.

Self-efficacy (Bandura, 1977) may be responsible for the lack of congruence between the two measures. A lack of self-efficacy might explain the frequent combination of low behaviour change motivation and high help-seeking motivation, whereas the combination of high behaviour change motivation and low help-seeking motivation might be explained by high self-efficacy. Another explanation for the combination of high help-seeking motivation and low behaviour change motivation might be external treatment motivation, being coerced to receive treatment by courts, employers or significant others. This, however, seems an unlikely scenario in a non-treatment seeking sample as used in this study. Unfortunately, both, self-efficacy and source of treatment motivation were not measured in the parent study and cannot be confirmed.

As predicted, low scores on both motivation measures were associated with lower alcohol problem severity and high scores on both measures were associated with higher alcohol problem severity. Severity differences were obtained between those motivated for help-seeking on one side and those not motivated for help-seeking on the other (regardless of readiness for change). Additionally, no significant severity differences among both ‘ready for help-seeking’ groups and among both ‘not ready for help-seeking’ groups were found. These findings indicate a greater relevance of problem severity for help-seeking readiness, while it did not affect the level of general change readiness. Readiness to change may be based on other considerations, such as perceived self-efficacy or life experience and social support. In this study we found that higher change readiness was reported by older participants and those with a partner.
Some limitations to this study should be noted. Firstly, predictive validity of the composite measure regarding successful behaviour change with and without formal help was not investigated. Secondly, analyses regarding the connection between the TReaT and actual help-seeking have not yet been conducted. Thirdly, findings are based on two specific stage measures of motivation, the TReaT and the RCQ. Replication requires testing these findings by using different measures of motivation. Fourthly, the RCQ method of stage allocation by the highest scale score is controversial since endorsement of precontemplation items is subject to social desirability bias, and often is not highly endorsed (DiClemente et al., 2004). That, however, should not have affected our findings since both measures in this study used the same allocation method. Fifthly, generalizability of our findings may be limited. Most of our sample was male, single, had less than a 10th grade education, and were unemployed. Furthermore, we interviewed a general medical group rather than a help-seeking group. Concluding, future studies are needed to investigate (i) the predictive validity of the composite assessment, (ii) the connection between TReaT and actual help-seeking, and (iii) the generalizability of our findings across different socio-economic groups and help-seeking clients.

Despite these limitations, findings strongly suggest the need for a composite assessment to best assess clients’ need and receptivity to formal help-seeking. If treatment programmes do not consider both, they might overestimate or underestimate clients’ motivation. The composite assessment (in contrast to neglecting one of the two dimensions) seems to provide a more detailed picture of the clients’ true motivation. Treatment programmes are challenged by clients ready to seek help but not ready to change their drinking. Another interesting question is what to do with those ready to change but not ready to accept help. Considering that most people recover from their alcohol problem without formal help (Sobell et al., 1996), it poses the question of whether we should trust in their ability to change without help or whether we should motivate them to seek professional help. When considering both, motivation to change and motivation to seek help, stage-tailored interventions based on motivational interviewing (Miller and Rollnick, 2002) may be helpful to enhance one or the other part of motivation.

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