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The association between shame and substance misuse in young people: A review of the literature

BACKGROUND: Shame has been associated with a range of maladaptive behaviours, including substance abuse. Young people may be particularly vulnerable to heightened shame sensitivity, and substance abuse is a significant problem amongst UK adolescents. Although there appears to be a relationship between shame and substance abuse, the direction of the relationship remains unclear. **AIM:** We reviewed the literature relating to shame and substance abuse amongst young people. **METHOD:** Five electronic databases were searched for articles containing terms related to 'adolescence', 'shame' and 'substance abuse'. Of the two hundred and twelve articles identified in the first sweep, six were included in the final analyses. **RESULTS:** Sexual abuse is indicated as a predictor of shame-proneness. Substance abuse may be a mechanism by which individuals cope with negative feelings. In general, there is a lack of literature investigating the shame-substance abuse relationship among adolescents. The available literature associates shame-proneness with poorer functioning and suggests that this may lead to psychopathology and early-onset substance misuse. Scant attention has been paid to the cognitive and emotional processes implicated. Further research is required to ascertain the strength of the shame-substance abuse relationship in young people and to develop appropriate interventions for this population.

1 The association between shame and substance misuse in young people: A review of
2 the literature

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12 amongst UK adolescents. Although there appears to be a relationship between
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15 amongst young people. **METHOD:** Five electronic databases were searched for
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21 shame-substance abuse relationship among adolescents. The available literature
22 associates shame-proneness with poorer functioning and suggests that this may
23 lead to psychopathology and early-onset substance misuse. Scant attention has
24 been paid to the cognitive and emotional processes implicated. Further research is
25 required to ascertain the strength of the shame-substance abuse relationship in
26 young people and to develop appropriate interventions for this population.

27 **Keywords:** shame; substance abuse; adolescents

28 **Introduction**

29 A significant body of research has investigated the effect of factors related to self-
30 concept on substance use in young people. Self-esteem, impulsivity and shame
31 have all been associated with drug and alcohol use in young people but current
32 understanding of the association with shame in particular is limited. This paper will
33 review current empirical and conceptual understanding of the association between
34 shame and substance use in this population.

35 Shame relates to global, negative feelings about the self (Dearing, Stuewig, &
36 Tangney, 2005). It has been described as an intense negative emotion, which can
37 result in feelings of inferiority and powerlessness (Wicker, Payne, & Morgan, 1983).
38 Shame can arise from a disparity between the ideal self and the actual real self,
39 leading to feelings of inadequacy and disgust. Although it is generally associated
40 with negative consequences, it is notable that shame is a universally-experienced
41 emotion and that moderate levels can be beneficial (Cook, 1987; Potter-Efron,
42 1987).

43 Much of the literature has sought to distinguish the concepts shame and guilt. It has
44 been suggested that both emotions are essential to the experience of being human
45 and that they can occur either independently or in tandem with each other (Clark,
46 2012). Both shame and guilt enable self-evaluation and serve to guide our
47 interactions with others (Tangney & Dearing, 2002). Shame has been described as a
48 'failure of being', or global self-condemnation, whilst guilt has been referred to as a
49 'failure of doing' (Potter-Efron, 1987). As such, shame is characterised by 'hiding' the
50 self, whereas guilt may manifest itself in reparative behaviours. Consequently,
51 similar situations can result in distinct responses, depending on the individual's
52 attributional style (Lewis, 2008). Vulnerability to shame can arise from a conflict
53 between the ideal self and the actual self, whilst vulnerability to guilt is perceived to
54 result from conflict between the actual self and the 'ought' self (Moretti & Tory-
55 Higgins, 1990). It appears that shame is directed primarily at the self, whereas guilt
56 addresses the particular act, and may be implicated in social conformity (Quiles,
57 Kinnunen, & Bybee, 2002). Shame-proneness is often internalized and has been
58 associated with the development of psychopathology, whilst proneness to guilt
59 correlates with non-pathological, adaptive empathy (Tangney, Wagner, & Gramzow,

60 1992). Feeling shameful warns the individual that their actions may result in them
61 being rejected by others; to avoid rejection, the individual seeks to find alternative
62 ways of behaving (Nathanson, 1987).

63 **The development of shame in children and young people**

64 The development of shame is dependent on the individual possessing sufficient
65 cognitive capacity, having an awareness of social rules and expectations, and an
66 understanding of their behaviour in comparison to those expectations, as well as
67 adequate theory of mind (Gilbert, 2002; Lewis, 2003). As such, it is unlikely that
68 shame develops before the age of two years (Zahn-Waxler, Radke-Yarrow, Wagner, &
69 Chapman, 1992).

70 Sexual abuse, insecure attachment styles and harsh parenting have all been
71 associated with the development of shame in children (Feiring, Deblinger, Hoch-
72 Espada, & Haworth, 2002; Gross & Hansen, 2000; Jeffrey & Jeffrey, 1991; Stuewig &
73 McCloskey, 2005). Shame is not an automatic consequence of significant trauma,
74 however. In families where factors such as parental substance misuse are
75 implicated, children may develop more empathic attitudes as they try to minimise
76 parental disturbance (Lewis, 1995). If they fail to do so, they are likely to blame
77 themselves, developing a negative global attributional style and heightened
78 proneness to shame (Lewis, 1995). Differences in the ways males and females are
79 socialised can result in females developing a greater sense of responsibility and
80 becoming more shame-prone than their male peers, despite having experienced
81 similar early life events (Lewis, 1995; Tangney, 1990).

82 The manner in which shame manifests itself differs according to the child's
83 developmental stage. Young children may experience shame as feeling embarrassed
84 and inferior, coping with these adverse emotions by behaving in a controlling,
85 critical or rageful manner (Bradshaw, 2005). They may also polarise themselves and
86 others as being 'all good' or 'all bad'. During puberty shame can be experienced as
87 limiting one's ability to form their identity and may serve to isolate the individual
88 (Bradshaw, 2005). Self-evaluation is central to the development of shame in younger
89 children (Lewis, 1995; Lewis, 2003), whereas adolescents are more likely to be self-
90 evaluative and to compare themselves negatively to peers (Reimer, 1996). It may be
91 the case that some adolescents develop an enhanced vulnerability to feeling

92 shameful, potentially resulting in the use of maladaptive coping strategies and
93 making them more vulnerable to depression, eating disorders and suicide (Reimer,
94 1996).

95 **Substance use amongst adolescents**

96 By the age of 17, 75% of American adolescents have drunk alcohol and 28% report
97 having binged on alcohol in the previous two weeks (Gunzerath, Hewitt, Li, &
98 Warren, 2011). Those who begin using alcohol between the ages of 14 and 16 are
99 four times as likely to develop alcohol-related problems in later life than those who
100 begin drinking in their 20s (Gunzerath et al., 2011).

101 In the UK, 84% of 12-17 year-olds have drunk alcohol and 36% are frequent drinkers.
102 15% have been involved in antisocial behaviour as a result of drinking. 22% of boys
103 and 25% of girls within this cohort have been drunk three or more times in the past
104 month, whilst 26% and 29% respectively have binged on alcohol three or more
105 times in the same time period. 42% of boys and 35% of girls report having been
106 drunk at least once before the age of 13 (Institute for Alcohol Studies, 2010). The
107 same report stated that two major reasons given for underage drinking were
108 'escapism' and 'gaining respect from peers'. With reference to illicit substances,
109 18% of 11-15 year-olds report having used drugs; 12% having done so in the past
110 year. Around 5% of 11 year-olds have used drugs in the past year and the figure
111 rises to 25% amongst 15-year olds. Cannabis is the most widely-used drug, taken by
112 8% of 11-15 year-olds in 2010. Truancy and school suspension are highly
113 correlated with regular drug use, and although 23 000 Britons under the age of 18
114 accessed support for their substance misuse in 2009/10, only one in three
115 completed treatment (NHSIC, 2011).

116 **The relationship between shame and substance abuse**

117 In adult samples, shame has been strongly implicated in behaviours which enable
118 individuals to escape feelings of worthlessness and failure, such as binge-eating,
119 sexual risk-taking and substance use (Adams & Robinson, 2001; Hayaki, Friedman, &
120 Brownell, 2002; Peñas-Lledó, Fernández, & Waller, 2004; Talbot, Talbot, & Tu, 2004).
121 Heightened feelings of shame significantly increase vulnerability to addictive
122 behaviours, particularly substance abuse (Cook, 1987). Although several studies
123 indicate that the feelings of shame which can arise from the stigma surrounding

124 substance misuse may serve as a barrier to treatment (Cook, 1987; Corrigan,
125 Watson, & Miller, 2006; Luoma et al., 2007), it has been suggested that this stigma
126 has a greater effect amongst certain groups. In particular, females seeking
127 treatment for substance-related problems may face greater stigma than males and
128 often risk the breakdown of intimate relationships, as well as the removal of their
129 children (Blume, 1990; O'Connor, Berry, Inaba, & Weiss, 1994; Reed, 1987).
130 Consequently, females who enter treatment programs often experience higher
131 levels of shame and guilt than their male counterparts (Mason, 1991).

132 **Rationale for the current review**

133 As described, some evidence suggests that shame can arise from early adversity
134 and that it is correlated with a range of maladaptive behaviours, including substance
135 misuse. Substance misuse is a significant problem amongst young people but little
136 research has investigated the impact of shame on drug and alcohol use in this
137 population. This paper will review empirical evidence on the relationship between
138 shame and substance abuse in young people in order to identify the areas that
139 substance misuse interventions might focus on in this population.

140 **Search strategy**

141 Five electronic databases were searched (PsycArticles, PsycInfo, Medline, Web of
142 Science and PubMed) for English-language articles published in peer-reviewed
143 journals for all periods up to, and including, January 2012. Articles were searched for
144 using terms related to 'adolescence' (e.g., 'adolescenc*', 'teen*', 'child*', 'juvenile*',
145 'youth*'), 'shame' (e.g. 'shame*') and 'substance abuse' (e.g., 'substanc*', 'drug*',
146 'alcohol*', 'illicit*', 'drink*'). The use of '*' denotes truncated search terms. For the
147 purposes of this review, 'adolescent' refers to individuals aged 11-19. Where
148 databases could be searched by topic, 'psychology' was specified. The search
149 yielded 220 unique results. Following review of the abstracts, articles were excluded
150 if they were unavailable in English (n=9) or if they focused on unrelated physical or
151 psychological health problems (n=58). A further 64 articles were excluded for other
152 reasons, e.g. focusing on shame related to physical health issues such as HIV. Of the
153 remaining 89 articles, 59 were excluded as they did not contribute to the literature
154 relating to the relationship between shame and substance abuse (e.g. 19 papers
155 focused on shame arising from parental substance abuse use). The remaining

156 articles (n=30) were read to ensure that they included a research question and
157 outcome measures. Seven papers exclusively reviewed the literature, but were not
158 empirical studies. Another five discussed cases and process issues in therapy but,
159 did not relate specifically to shame as either a contributing factor or a consequence
160 of substance abuse. Given that these papers did not contribute to the scientific
161 understanding of the relationship between shame and substance abuse, they were
162 excluded. A further ten papers were excluded as they used samples of children (pre-
163 teen) or adults (post-adolescent). Two papers were excluded as they used
164 adolescent samples but did not address substance use. The final analyses included
165 six empirical papers.

166 **Results**

167 Details of the articles reviewed can be seen in Table 1. All of the papers had been
168 published between 1989 and 2012. Four of the studies were quantitative in
169 methodology and two were qualitative. Amongst the quantitative studies, sample
170 sizes ranged from 97-816. The qualitative studies employed 12 and 597
171 participants, respectively. One paper considered the development of shame in young
172 people in treatment for substance use; five investigated the relationship between
173 shame and substance use.

174 ***Insert Table 1 here***

175 **The role of sexual abuse in the development of shame**

176 Of the six studies reviewed, one investigated factors resulting in heightened shame
177 in later life (Edwall, Hoffmann, & Harrison, 1989). This study identified sexual abuse,
178 including incest, as predictive of shame-proneness. In their qualitative study of 597
179 adolescent girls, it was found that 35% of inpatients receiving treatment for
180 substance abuse reported previous sexual abuse. Sexual abuse was highly
181 correlated with a history of physical abuse and those who had been sexually abused
182 were more likely to have attempted suicide in the previous year. Sexual abuse was
183 also highly correlated with feelings of shame, particularly amongst those who had
184 experienced only extrafamilial abuse ($p < 0.001$). The authors concluded that abused
185 female adolescents may internalise adverse experiences and construct an image of
186 themselves as 'bad', making them vulnerable to suicidal ideation and mental health
187 problems. Methodologically, however, the study had some limitations: 58 girls who
188 denied having been sexually abused during interviews with the research team were
189 categorised by their therapists as having reported sexual abuse in therapy sessions,
190 and excluded from analyses. Additionally, the researchers made no use of
191 standardised measures, and thus the severity of the shame experienced cannot be
192 assessed. No attempt was made to ascertain the duration or nature of the sexual
193 abuse and only limited information pertaining to the course of the participants'
194 misuse of substances was available.

195 **The relationship between shame and substance misuse**

196 Two of the studies included in this review found significant associations between
197 feelings of shame and maladaptive behaviours, including substance abuse
198 (Abramowitz & Berenbaum, 2007; Dearing et al., 2005).

199 Abramowitz & Berenbaum's (2007) study found that the desire to enhance positive
200 affect was a strong motivator of alcohol use, and that shame reliably predicted
201 'impulsive-compulsive' (IC) behaviours, including substance abuse, sexual activity,
202 playing video games and obsessive-compulsive-type behaviours such as cleaning.
203 Shame was most strongly associated with substance abuse (correlation = 0.16;
204 $p < 0.05$). However, their data were based on retrospective accounts of behaviours
205 the participants had engaged in during the past three months and, although the
206 associations reported were statistically significant, there was no opportunity to
207 investigate the direction of causality in the relationship. In addition, the sample was
208 aged 16-30 and, as the authors note, many impulsive and compulsive behaviours
209 diminish with age.

210 Carrying out semi-structured interviews with college students, Lashbrook (2000)
211 found that the desire to avoid ridicule, isolation and feeling inadequate was a key
212 factor in alcohol use. Despite the participants not using terms such as 'shame'
213 explicitly, the literature suggests that ridicule, isolation and inadequacy are closely
214 linked to constructs of shame-proneness (Cook, 1987; Potter-Efron, 1987; Wicker et
215 al., 1983). It is possible that low self-esteem was implicated in these negative
216 emotions, although this was not investigated as part of Lashbrook's study. More
217 recent research indicates that low self-esteem is associated with vulnerability to
218 peer pressure and increased substance use (Dielman, Campanelli, Shope, &
219 Butchart, 1987)

220 Dearing et al. (2005) carried out three studies to test the relationships between
221 shame- and guilt-proneness amongst undergraduate students and prison inmates,
222 hypothesising that the former would be positively correlated with substance abuse,
223 whilst the opposite would be true for guilt-proneness. Of their undergraduate
224 sample, 7.3% had symptoms on problematic alcohol use and 15.4% indicated
225 symptoms of problematic drug use. Shame was positively correlated with alcohol
226 problems but not with problematic drug use. In contrast, guilt was found to correlate

227 negatively with both drug and alcohol problems; findings which supported those
228 presented by Quiles et al. (2002). The authors concluded that although shame-
229 proneness was significantly associated with problematic drug use, it was more
230 strongly correlated with alcohol use. The shame-substance abuse relationship
231 appears consistent amongst samples regardless of the severity of substance abuse
232 and appears to be applicable to a range of populations. The authors suggested that
233 alcohol and drugs may be used as a way of coping with difficult feelings, such as
234 shame, but noted that the use of substances may in itself result in additional shame.

235 The majority of the studies included in this review indicate that vulnerability to
236 shame is associated with increased drug and alcohol use in young people. Some
237 research suggests that feelings of shame can arise as a consequence of using
238 substances (Arentzen, 1978; Blume, 1990; Cook, 1987; Corrigan et al., 2006;
239 Fossum & Mason, 1986; Luoma et al., 2007; O'Connor et al., 1994; Reed, 1987),
240 and , of the papers reviewed here, one suggests that, amongst those who already
241 use substances problematically, shame may have a positive impact by increasing
242 motivation to seek treatment. In their study of 188 16-24 year-olds entering
243 treatment for moderately problematic substance abuse, Rosenkranz, Henderson,
244 Muller, & Goodman (2012) found that those individuals who reported greater shame-
245 proneness were more likely to recognise their substance misuse and seek treatment.
246 Further research has suggested that these individuals demonstrate superior
247 treatment outcomes (Williams et al., 2008). However, the data were subject to
248 disclosure biases, and Rosenkranz et al. (2012) used a measure of treatment
249 motivation which conflates proneness to shame with motivation to seek treatment,
250 and which included items (e.g., If I remain in treatment it will probably be because
251 I'll feel very bad about myself if I don't) open to being interpreted as either 'shame'
252 or 'guilt' by participants.

253 **Discussion**

254 **Summary of findings**

255 This paper sought to review the literature relating to shame and substance abuse
256 amongst young people. Despite the search strategy specifying 'adolescent', and
257 variations thereof, only five papers used samples which investigated teenagers and
258 young adults. An additional study carried out by Quiles et al. (2002), used a sample

259 aged ≤ 27 but excluded all participants aged 22-27 ($n=17$) from their analyses and
260 was thus included in this review. Amongst the remainder of the studies the
261 participants ranged in age from 7-80. It appears that there is a paucity of research
262 into the association between shame and substance abuse amongst young people
263 and this lack of data limits the extent to which theoretical or empirical conclusions
264 can be drawn. It appears that early maltreatment and neglect can result in
265 heightened shame-proneness, possibly as a result of the adverse experiences being
266 internalised, and that greater maladjustment results from more severe adversity.
267 Although the shame arising from maladaptive early experiences has been found to
268 correlate significantly with substance-abusing behaviours, it may also motivate
269 individuals to seek and engage in treatment. It appears from the evidence reviewed
270 that it is shame which is most heavily implicated in these mechanisms, not guilt.

271 The literature suggests that shame-proneness is generally associated with poorer
272 functioning, psychopathology and early-onset substance misuse. Adolescents are
273 more likely to compare themselves negatively to peers (Reimer, 1996) and those
274 who develop heightened proneness to shame may be more likely to utilise coping
275 strategies such as criminal or risk-taking behaviours in an attempt to gain
276 acceptance from peers (Adams & Robinson, 2001; Arnett, 1995; Hayaki, Friedman, &
277 Brownell, 2002; Peñas-Lledó, Fernández, & Waller, 2004; Talbot, Talbot, & Tu, 2004).

278 Whilst there is some indication that higher levels of shame result in a greater
279 number of maladaptive behaviours (Cook, 1987), it also appears that shame-
280 proneness can affect males and females differently. Based upon the evidence
281 reviewed here, it is tentatively speculated that shame in females results in
282 behaviours which harm the self, such as eating disorders, whereas males externalise
283 the negative self-image and act in a more antisocial manner. It is suggested that, if
284 shame encompasses negative affect and symptoms typically observed in
285 depression, it is to be expected that young people who demonstrate a tendency
286 towards feeling shame would also score poorly on measures of self-worth and self-
287 esteem.

288 The studies included in this review were conducted using a wide range of outcome
289 measures and methodological designs; each of which demonstrated both strengths
290 and limitations. For the most part, researchers made efforts to distinguish between

291 shame and guilt which is a key methodological requirement given the conceptual
292 overlap in these variables. Nevertheless, it is of note that each of the studies
293 reviewed here conceptualised shame in distinct ways and investigated different
294 facets of substance use, further limiting the extent to which overarching
295 conclusions can be drawn.

296 **Gaps in the literature**

297 In addition to the limited literature that focuses exclusively on adolescent
298 populations, the majority of studies have failed to address misuse of substances in a
299 discrete manner. Although some studies asked about drug and alcohol use
300 separately (Dearing et al., 2005; Quiles et al., 2002), not all did so. It cannot be
301 presumed a priori that all addictive behaviours are a product of the same
302 mechanisms and this warrants further investigation.

303 More fundamentally, although there is some evidence of an association between
304 shame and substance abuse, there has been little focus on the cognitive and
305 emotional processes which mediate this relationship. Shame is associated with
306 substance abuse, and substance abuse has a major impact on both society and the
307 individual; as such, future research should try to identify salient risk factors and
308 develop effective treatments. This review has not included studies which aim to
309 treat substance misuse per se; although two studies did use participants engaged in
310 treatment programmes (Edwall et al., 1989; Rosenkranz et al., 2012) and there is
311 some indication that reducing shame is integral to positive treatment outcomes.
312 Some research suggests that particular factors related to shame, specifically
313 'fragility and lack of control' and 'loneliness and emptiness', appear to be associated
314 with addiction (Cook, 1987), and future research should investigate the specific
315 antecedents and maintenance processes of these factors and the implications for
316 substance abuse treatments. At present, some evidence suggests that shame
317 results in vulnerability to addiction to alcohol and illicit drugs, but little
318 understanding of how. Similarly, there is an absence of evidence relating to the age
319 at which shame-prone adolescents are most vulnerable to substance abuse. Few
320 studies have investigated young people exclusively, and, of the papers reviewed
321 here, none has compared adolescents at different developmental stages. It may be
322 that there is a point of 'greatest vulnerability' and, if so, there will be significant
323 implications for the ways in which adolescents are educated about alcohol and illicit

324 substances, and preventative measures are established. In addition, the majority of
325 the studies used samples in which females were over-represented. Future work
326 should attempt to redress the balance by investigating the shame-substance abuse
327 relationship in both young males and young females.

328 In this review, only papers relating to Western cultures were included. Although
329 there was a clear rationale for this, given the prevalence of adolescent substance
330 abuse in the UK and USA, there has been limited scope to investigate the shame-
331 substance abuse relationship, or the meaning surrounding substance use, in social
332 sub-groups. Although some studies used samples diverse in ethnicity and age, the
333 present review has noted little that is relevant to constructs of class or religious
334 belief. Although such factors have been investigated to only a limited degree, some
335 research has attempted to improve our understanding of them (Rastogi & Wadhwa,
336 2006; Sandberg, 2010). Misusing substances may result in heightened shame only in
337 specific groups; alternatively, certain social clusters may be more or less inclined to
338 misuse substances. It should not be presumed that the findings of this review can be
339 applied to all groups without further exploration of salient factors.

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Table 1 (on next page)

Selected papers

Table 1 - Papers selected for review

Authors & Title	Year	Research Aim	Measures	Sample	n	Findings	Evaluation
Abramowitz, A., & Berenbaum, H. Emotional triggers and their relation to impulsive and compulsive psychopathology.	2007	Emotional triggers as a predictor of impulsive-compulsive behaviours	BIS-11, OCI	College Students	189	Anger & shame predict I-C pathology	Correlational study
Dearing, R. L., Stuewig, J., & Tangney, J. P. On the importance of distinguishing shame from guilt: Relations to problematic alcohol and drug use.	2005	Clarifying the role of shame and guilt in substance abuse	MCFI & TOSCA	Students & inmates	816	Shame correlates with substance abuse in both samples	Correlation
Table 1 - Included articles Edwall, G. E., Hoffmann, N. G., & Harrison, P. A. Psychological correlates of sexual abuse in adolescent girls in chemical dependency treatment.	1989	Psychopathology & self-concept in victims of sexual abuse	Interviews by counsellors	Adolescent females	597	Sexual abuse & shame are common in substance abuse	Limited data re: severity of abuse
Lashbrook, J. T. Fitting in: Exploring the emotional dimension of adolescent peer pressure.	2000	Emotions and conformity	Qualitative	College students	12	Facets of shame motivate individuals to drink alcohol with peers	Small sample; Retrospective

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Quiles, Z. N., Kinnunen, T., & Bybee, J. Aspects of guilt and self-reported substance use in adolescence.	200 2	The relationship between guilt and adolescent substance abuse	TOSCA, GI, MFCGI, PFQ2	Students	230	Substance abusers have weaker internalisation of societal standards	Retrospective, self-report data Focus on guilt
Rosenkranz, S. E., Henderson, J. L., Muller, R. T., & Goodman, I. R. Motivation and maltreatment history among youth entering substance abuse treatment.	201 2	The relationship between maltreatment and motivation to change	SOCRATES, TEQ, TAQ, AUDIT, DAST, PSS	16-24 year-old substance abusers	188	Shames is associated with substance use	89% positive response rate Self-reported maltreatment