**Supplementary Materials.**

**Included studies (N=235).**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Author and year** | **Aim** | **Study design** | **Participants** | **Type of cocaine** | **Cue** | **Population** | **Quality appraisal\*** | **Sense** |
| **Alcorn et al. 2017** | Cocaine task for attentional bias and  cocaine task for eye tracking | Exploratory study | N = 20 | Cocaine | Images | Nonclinical | 7.5 | Visual |
| **Alcorn et al. 2020** | Cocaine task for eye-tracking and  to assess medication as part of cocaine treatment | Within-subject, outpatient, acute dosing study | N = 12 | Cocaine | Images | Clinical | 6.5 | Visual |
| **Alim et al. 1995** | To assess medication as part of cocaine treatment | 2-week double-blind, double-dummy, parallel-group comparison of four dosage levels | N = 50 | Crack | Images | Nonclinical | 7.5 | Visual |
| **Alves et al. 2012** | Assessing treatment for cocaine dependence (with the use of cues) | Exploratory study | N = 30 | Cocaine and crack | Images and videos | Nonclinical | 6.5 | Visual |
| **Anastasio et al. 2014** | Gene testing | Translational study | N = 114 | Cocaine | Drug attentional bias task (Stroop test) | Nonclinical | 7 | Visual |
| **Antons et al. 2023** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 52 (n=28 CD, n=24 GD) | Cocaine | Videos | Nonclinical | 7 | Visual |
| **Araujo et al. 2015** | Assess cue-induced craving | Quasi-experimental study | N = 210 (n=70 crack, n=70 tobacco, n=70 marijuana) | Crack | Images | Clinical | 7 | Visual |
| **Avants et al. 1995** | Assess cue-induced craving | Exploratory study | N = 69 | Cocaine | Paraphernalia and videos | Clinical | 6.5 | Visual  Tactile |
| **Back et al. 2010** | Assess cue-induced craving | Exploratory study | N = 53 | Cocaine | Paraphernalia and videos | Nonclinical | 7 | Visual  Tactile |
| **Bardeen et al. 2014** | Cocaine task for attentional bias | Exploratory study | N = 58 (n=22 with BPD, n=36 without BPD) | Cocaine | Images and script | Clinical | 6.5 | Visual  Auditory |
| **Bauer & Kranzler 1994** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 34 (n=18 CD, n=16 ND) | Cocaine | Videos | Nonclinical | 6.5 | Visual |
| **Becker et al. 2020** | To assess medication as part of cocaine treatment | Randomised, double-blind study | N = 33 | Cocaine | Script | Nonclinical | 6.5 | Auditory |
| **Bell et al. 2014** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 20 | Cocaine | Images | Clinical and nonclinical |  | Visual |
| **Berger et al. 1987** | To assess medication as part of cocaine treatment | Randomised, single-dose, crossover, placebo-controlled design | N = 20 | Cocaine | Paraphernalia and videos | Clinical |  | Visual  Auditory  Tactile |
| **Bergquist et al. 2010** | Discussion of drug cues | Exploratory study | N = 56 | Cocaine | Script | Nonclinical | 7 | Auditory |
| **Bonson et al. 2002** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 11 | Cocaine | Paraphernalia, script and videos | Nonclinical | 6.5 | Visual  Auditory  Tactile |
| **Bordnick et al. 2004** | Assessing treatment for cocaine dependence (with the use of cues) | Between-groups study | N = 70 | Cocaine | Drug use (placebo powder and crack), paraphernalia, script and smell | Clinical | 7.5 | Visual  Auditory  Tactile  Olfactory |
| **Callans et al. 2024** | To assess medication as part of cocaine treatment and  cocaine task for brain activity | Randomised, double-masked, placebo-controlled clinical trial | N = 9 | Cocaine | Videos | Nonclinical | 7.5 | Visual |
| **Campbell et al. 2019** | To assess medication as part of cocaine treatment | Double-blind study | N = 23 | Cocaine | Audiotape, paraphernalia and videos | Nonclinical | 6.5 | Visual  Auditory  Tactile |
| **Carpenter et al. 2012** | Cocaine task for attentional bias | Exploratory study | N = 25 | Cocaine | Drug attentional bias task (Stroop test) | Clinical | 6.5 | Visual |
| **Ceceli et al. 2023** | Cocaine task for brain activity | Comparative neuroimaging study | N = 52 (n=26 CUD, n=26 control) | Cocaine | Drug attentional bias task (Stop-Go) | Nonclinical | 6.5 | Visual |
| **Chaplin et al. 2010** | Assess cue-induced craving | Comparative exploratory | N = 165 (n=52 AD, n=45 CD, n=68 HC) | Crack | Script | Nonclinical | 7 | Auditory |
| **Childress et al. 1999** | Cocaine task for brain activity | Comparative neuroimaging study | N = 20 (n=14 past cocaine users, n=6 controls) | Cocaine | Videos | Clinical | 6 | Visual  Auditory |
| **Childress et al. 2008** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 22 | Cocaine | Images | Clinical | 6 | Visual |
| **Coffey et al. 2002** | Assess cue-induced craving | Comparative, exploratory study | N = 75 (n= =30 CD + PTSD, n=45 AD + PTSD) | Crack | Images | Clinical | 6.5 | Visual |
| **Conti et al. 2014** | Cocaine task for brain activity | Randomised, sham-controlled neuro-navigated rTMS study design | N = 13 | Crack | Images | Clinical | 7.5 | Visual |
| **Cope et al. 2014** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 137 (incarcerated) | Cocaine | Images | Clinical (criminal) | 6.5 | Visual |
| **Copersino et al. 2004** | Cocaine task for attentional bias | Comparative, exploratory study | N = 20 | Cocaine | Drug attentional bias task (Stroop test) | Clinical | 7 | Visual |
| **Cox et al. 2017** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 9 | Cocaine | Drug preparation task, drug use and videos | Nonclinical | 6 | Visual  Auditory  Tactile |
| **D’Amour-Horvat et al. 2022** | Cocaine task for brain activity | Comparative, neuroimaging study | N = 24 (n=19 CU, n=12 H) | Cocaine | Videos | Nonclinical | 6.5 | Visual  Auditory |
| **Dackis et al. 1987** | To assess medication as part of cocaine treatment | Randomised, double-blind, placebo-controlled study | N = 13 | Cocaine | Paraphernalia | Nonclinical | 7 | Visual  Tactile |
| **Dakwar et al. 2014** | Assess cue-induced craving | Crossover, double-blind trial | N = 8 | Crack | Paraphernalia | Nonclinical | 7.5 | Visual  Tactile |
| **Denomme & Shane 2020** | Cocaine task for brain activity | Comparative, neuroimaging study | N = 101 (n=57 ND, n=24 NW, n=20 W) | Cocaine | Videos | Nonclinical (criminal) | 7 | Visual |
| **DeSantis et al. 2009** | Assess cue impact on drug use | Exploratory study | N = 45 | Cocaine | Paraphernalia and videos | Nonclinical | 7 | Visual  Tactile |
| **Devito et al. 2018** | Assessing treatment for cocaine dependence (with the use of cues) | Randomised controlled trial | N = 140 | Cocaine (on methadone treatment) | Words | Clinical | 7.5 | Visual |
| **Dias et al. 2015** | Cocaine task for attentional bias and  Cocaine task for eye tracking | Comparative, exploratory study | N = 87 (n=46 CU, n=41 H) | Cocaine | Images | Nonclinical | 7 | Visual |
| **Díaz-Batanero et al. 2018** | Cocaine task for attentional bias | Longitudinal study | N = 71 | Cocaine | Images | Clinical | 6.5 | Visual |
| **DiGirolamo et al. 2015** | Cocaine task for eye-tracking | Exploratory study | N = 30 | Cocaine | Paraphernalia | Clinical | 7 | Visual  Tactile |
| **DiGirolamo et al. 2017** | Cocaine task for eye-tracking | Exploratory study | N = 24 | Crack | Image | Clinical | 6.5 | Visual |
| **Dudish-Poulson et al. 1997** | Assess cue impact on drug use | Placebo-controlled, cross-over study | N = 11 | Crack | Drug use (placebo) and images | Nonclinical | 6.5 | Visual  Tactile  Gustatory |
| **Duncan et al. 2007** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 10 | Crack | Script | Nonclinical | 6.5 | Auditory |
| **Dunning et al. 2011** | Cocaine task for brain activity | Comparative, exploratory study | N = 84 participants (n=55 CUD abstinent and current, n=29 healthy) | Cocaine | Images | Nonclinical | 7 | Visual |
| **Ehrman et al. 1992** | Assess cue-induced craving | Exploratory study | N = 15 | Cocaine | Audiotape, drug preparation task and videos | Nonclinical | 6.5 | Visual  Auditory  Tactile |
| **Ehrman et al. 1996** | To assess medication as part of cocaine treatment | Double-blind placebo-controlled study | N = 45 | Cocaine | Audiotape, paraphernalia and videos | Clinical | 8 | Visual  Auditory  Tactile |
| **Ehrman et al. 1998** | Assess cue impact on drug use | Exploratory study | N = 69 | Cocaine | Audiotape, paraphernalia and videos | Clinical | 6.5 | Visual  Auditory  Tactile |
| **Elton et al. 2015** | Cocaine task for brain activity | Comparative, neuroimaging study | N = 38 | Cocaine | Scripts | Nonclinical | 6.5 | Auditory |
| **Engeli et al. 2023** | Cocaine task for brain activity | Randomised, double-blind, placebo-controlled, counterbalanced crossover study | N = 41 | Cocaine | Videos | Nonclinical | 8 | Visual |
| **Fernández-Calderón et al. 2021** | Cocaine task for attentional bias | Exploratory study | N = 70 | Cocaine | Images | Clinical | 6.5 | Visual |
| **Foltin & Fischman 1997** | Assess cue-induced craving | Exploratory study | N = 9 | Cocaine (smoking) | Paraphernalia | Nonclinical | 6.5 | Visual  Tactile |
| **Fotros et al. 2013** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 12 | Cocaine and crack | Drug preparation task, paraphernalia, script and videos | Nonclinical | 7 | Visual  Tactile |
| **Fox et al. 2005** | Assess cue-induced craving | Mixed design | N = 54 | Cocaine | Script | Nonclinical | 7 | Auditory |
| **Fox et al. 2006** | Assess cue-induced craving | Mixed design | N = 50 | Cocaine | Script | Nonclinical | 7 | Auditory |
| **Fox et al. 2008** | Assess cue-induced craving | Comparative, exploratory study | N = 80 (n=40 CU, n=40 controls) | Cocaine | Script | Nonclinical | 7 | Auditory |
| **Fox et al. 2009** | Assess cue-induced craving | Mixed design | N = 84 (n=42 CU, n=42 H) | Cocaine | Script | Nonclinical | 7 | Auditory |
| **Fox et al. 2012** | To assess immune system cytokines | Mixed design | N = 55 (n=28 CD, n=27 alcohol social) | Cocaine | Script | Nonclinical | 6.5 | Auditory |
| **Fox et al. 2012** | To assess medication as part of cocaine treatment | Randomised, double-blind, placebo-controlled laboratory study | N = 29 | Cocaine | Script | Nonclinical | 7.5 | Auditory |
| **Fox et al. 2013** | To assess medication as part of cocaine treatment | Randomised, double-blind, placebo-controlled laboratory study | N = 42 | Cocaine | Script | Nonclinical | 7.5 | Auditory |
| **Fox et al. 2013** | Assess cue-induced craving | Mixed repeated measures design | N = 85 (n=59 CD and AD, n=26 socially drinking HC) | Cocaine | Script | Nonclinical | 7 | Auditory |
| **Fox et al. 2014** | To assess medication as part of cocaine treatment | Randomised, double-blind, placebo-controlled laboratory study | N = 40 | Cocaine | Script | Nonclinical | 7.5 | Auditory |
| **Franken et al. 2000** | Cocaine task for attentional bias | Exploratory, pilot study | N = 16 | Cocaine | Words | Clinical | 5.5 | Visual |
| **Franken et al. 2004** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 21 | Cocaine | Images | Clinical | 6.5 | Visual |
| **Franken et al. 2008** | Cocaine task for brain activity | Comparative, neuroimaging study | N = 39 (n=23 CU, n=16 controls) | Cocaine | Images | Clinical | 6.5 | Visual |
| **Garavan et al. 2000** | Assess cue-induced craving | Comparative, neuroimaging study | N = 42 (n=24 CD, n=18 H) | Crack | Videos | Nonclinical | 7 | Visual |
| **Gardini et al. 2009** | Cocaine task for attentional bias | Comparative, exploratory study | N = 94 (n=24 CD, n=45 Heroin, n=25 H) | Cocaine | Drug attentional bias task (Stroop test) | Clinical | 5.5 | Visual |
| **Gervilla et al. 2022** | To test cocaine cues in virtual reality and  assessing treatment for cocaine dependence (with the use of cues) | Exploratory study | N = 10 | Cocaine | VR drug environments | Nonclinical | 6.5 | Visual |
| **Giasson-Gariépy et al. 2017** | Assess cue-induced craving | Comparative, exploratory pilot study | N = 28 (n=12 CU, n=16 CU and cannabis user) | Cocaine | Videos | Nonclinical | 7 | Visual |
| **Goldstein et al. 2007** | Cocaine task for attentional bias and  cocaine task for brain activity | Comparative, neuroimaging study | N = 14 | Cocaine | Drug attentional bias task (Stroop test) | Nonclinical | 6 | Visual |
| **Goldstein et al. 2007** | To assess verbal fluency | Comparative, exploratory study | N = 42 | Cocaine | Words | Nonclinical | 6.5 | Visual |
| **Goldstein et al. 2009** | Cocaine task for brain activity | Comparative, neuroimaging study | N = 34 (n=17 CD, n=17 H) | Cocaine | Words | Nonclinical | 6.5 | Visual |
| **Goldstein et al. 2009** | Cocaine task for brain activity | Comparative, neuroimaging study | N = 30 (n=15 CU, n=15 H) | Cocaine | Drug attentional bias task (Stroop test) | Nonclinical | 6.5 | Visual |
| **Goldstein et al. 2010** | Cocaine task for brain activity | Placebo-controlled, counterbalanced, neuroimaging study | N = 13 | Cocaine | Words | Nonclinical | 6.5 | Visual |
| **Gómez-Bujedo et al. 2019** | Cocaine task for attentional bias | Comparative, exploratory study | N = 186 | Cocaine | Images and words | Clinical | 7 | Visual |
| **Goudriaan et al. 2013** | Cocaine task for brain activity | Randomised placebo‐controlled cross-over study using pharmacological fMRI | N = 13 | Cocaine | Images | Clinical | 7.5 | Visual |
| **Grant et al. 1996** | Cocaine task for brain activity | Comaprative, exploratory study | N = 18 (n=13 CU, n=5 H) | Cocaine | Handle paraphernalia | Nonclinical | 6.5 | Visual  Auditory  Tactile |
| **Haney et al. 2021** | To assess medication as part of cocaine treatment | Exploratory study | N = 16 | Cocaine (smoking) | Drug use and cues (unspecified) | Nonclinical | 6.5 | Visual  Tactile  Gustatory |
| **Haeny et al. 2024** | Discussion of drug cues | Comparative, exploratory study | N = 36 (n=12 AD, n=12 CD, n=12 H) | Cocaine | Script | Nonclinical | 7 | Auditory |
| **Hanlon et al. 2018** | Cocaine task for brain activity | Comparative, neuroimaging study | N = 156 (n=55 CU, n=53 alcohol, n=48 nicotine) | Cocaine | Images | Nonclinical | 7 | Visual |
| **Harris et al. 2004** | To assess medication as part of cocaine treatment | Controlled clinical trial | N = 22 | Cocaine | Paraphernalia and videos | Nonclinical | 7 | Visual  Auditory  Tactile |
| **Hersh et al. 1995** | To assess medication as part of cocaine treatment | Randomised, double-blind, placebo-controlled trial | N = 50 (n=33 CD, n=7 H) | Cocaine | Videos | Nonclinical | 7.5 | Visual |
| **Hester et al. 2006** | Cocaine task for attentional bias | Comparative, exploratory study | N = 46 (n=23 cocaine users, n=HC) | Cocaine | Drug attentional bias task (Stroop test) and image | Nonclinical | 6.5 | Visual |
| **Hester & Garavan 2009** | Cocaine task for brain activity | Neuroimaging study | N = 16 | Cocaine | Images | Nonclinical | 6.5 | Visual |
| **Hochheimer et al. 2023** | Assess cue-induced craving | Exploratory study | N = 1974 | Cocaine | Images | Clinical | 7 | Visual |
| **Horrell et al. 2010** | Cocaine task for brain activity | Neuroimaging study | N = 10 | Cocaine | Images | Clinical | 6.5 | Visual |
| **Jobes et al. 2011** | To assess medication as part of cocaine treatment | Randomised, double-blind study | N = 59 | Cocaine | Script | Clinical | 8 | Auditory |
| **Jobes et al. 2015** | To assess medication as part of cocaine treatment | Randomised, double-blind study | N = 33 | Heroin dependent (using cocaine) | Script | Clinical | 7.5 | Auditory |
| **Johnson et al. 1998** | Assess cue-induced craving | Exploratory study | N = 30 | Cocaine | Audiotape, paraphernalia and videos | Nonclinical | 7 | Visual  Auditory  Tactile |
| **Johnson et al. 2020** | To assess medication as part of cocaine treatment | Randomised, double-blind, placebo-controlled trial | N = 39 (n=21 DCS, n=18 placebo) | Cocaine | Images | Nonclinical | 7.5 | Visual |
| **Joseph et al. 2019** | Cocaine task for brain activity | Randomised, counterbalanced crossover study | N = 67 | Cocaine | Images | Nonclinical | 7.5 | Visual |
| **Kaag et al. 2018** | Cocaine task for brain activity | Comparative, exploratory study | N = 117 (n=59 CU, n=58 controls) | Cocaine | Images | Nonclinical | 7 | Visual |
| **Kearney-Ramos et al. 2018** | Cocaine task for brain activity | Two single-blinded, within-subject, active sham-controlled experiments | N = 25 (in the cocaine study) | Cocaine | Images | Nonclinical | 6.5 | Visual |
| **Kearney-Ramos et al. 2019** | Cocaine task for brain activity | Single-blind, active sham-controlled crossover study | N = 25 | Cocaine | Images | Nonclinical | 7 | Visual |
| **Kennedy et al. 2014** | Cocaine task for attentional bias | Exploratory study | N = 35 | Cocaine | Drug attentional bias task (Stroop test) | Clinical | 7 | Visual |
| **Kexel et al. 2022** | Assess cue-induced craving | Comparative, exploratory study | N = 123 (n=69 CU, n=54 H) | Cocaine | Videos | Nonclinical | 7 | Visual |
| **Kilgus & Pumariega 1994** | Assess cue-induced craving | Exploratory study | N = 13 | Crack | Videos | Clinical | 7.5 | Visual |
| **Killeen & Brady 2000** | Assess cue-induced craving | Exploratory study | N = 30 | Cocaine and crack | Videos | Clinical | 6 | Visual |
| **Kilts et al. 2001** | Cocaine task for brain activity | Comparative, neuroimaging study | N = 8 | Cocaine | Script | Clinical | 6.5 | Auditory |
| **Kilts et al. 2004** | Cocaine task for brain activity | Repeated measures | N = 8 | Cocaine | Script | Clinical and nonclinical | 7 | Auditory |
| **Kober et al. 2016** | Cocaine task for brain activity | Comparative, neuroimaging study | N = 103 (n=30 CD, n=28 PG, n=45 control) | Cocaine | Videos | Nonclinical | 7 | Visual  Auditory |
| **Konova et al. 2019** | Cocaine task for brain activity | Comparative, neuroimaging study | N = 33 (n=18 chronic CU, n=15 matched controls) | Cocaine | Images | Nonclinical | 7 | Visual |
| **Kosten et al. 2006** | Cocaine task for brain activity | 12-week, randomised, placebo-controlled, double-blind clinical trial | N = 33 | Cocaine | Videos | Nonclinical | 7.5 | Visual |
| **Kranzler & Bauer 1992** | To assess medication as part of cocaine treatment | Randomised, double-blind, placebo-controlled study | N = 20 | Cocaine | Videos | Clinical | 7.5 | Visual |
| **Lam et al. 2013** | Cocaine task for brain activity | Exploratory study | N = 19 | Cocaine | Videos | Nonclinical | 6.5 | Visual |
| **Land et al. 2020** | To assess medication as part of cocaine treatment | Exploratory study | N = 101 (n=53 CU, n=48 HC) | Cocaine | Drug attentional bias task (Stroop test) | Nonclinical | 7 | Visual |
| **LaRowe et al. 2007** | Assess cue-induced craving and  to assess medication as part of cocaine treatment | Double-blind placebo-controlled trial | N = 15 | Cocaine | Images | Nonclinical | 6.5 | Visual |
| **Lehoux et al. 2024** | To test cocaine cues in virtual reality | Feasibility study | N = 11 | Cocaine | VR drug environments | Nonclinical | 6.5 | Visual  Auditory |
| **Leyton et al. 2005** | To assess medication as part of cocaine treatment | Randomised, double-blind, controlled trial | N = 8 | Cocaine | Paraphernalia | Nonclinical | 6.5 | Visual  Tactile |
| **Li et al. 2005** | Cocaine task for brain activity | Experimental, neuroimaging study | N = 11 | Cocaine | Script | Nonclinical | 6.5 | Auditory |
| **Li et al. 2005** | Cocaine task for brain activity | Experimental, neuroimaging study | N=27 | Cocaine | Script | Nonclinical | 6.5 | Auditory |
| **Lui et al. 1998** | Cocaine task for brain activity | Experimental, neuroimaging study | N = 17 | Cocaine | Paraphernalia and videos | Nonclinical | 6 | Visual  Tactile |
| **Liu et al. 2011** | Cocaine task for attentional bias | Experimental study | N = 69 (n=37 CU, n=32 HC) | Cocaine | Drug attentional bias task (Stroop test) | Nonclinical | 7 | Visual |
| **Liu et al. 2013** | To assess medication as part of cocaine treatment | Double-blind placebo-controlled trial | N = 23 | Cocaine | Drug attentional bias task (Stroop test) | Nonclinical | 7.5 | Visual |
| **Lowry et al. 2021** | Assess cue-induced craving | Mixed methods RCT | N = 31 | Cocaine | Audiotape, paraphernalia and videos | Clinical | 7.5 | Visual  Auditory  Tactile |
| **Ma et al. 2018** | Cocaine task for brain activity | Within-group study | N = 15 | Cocaine | Drug attentional bias task (Stroop test) | Clinical | 6.5 | Visual |
| **Ma et al. 2022** | Cocaine task for brain activity | Within-group study | N = 28 | Cocaine | Drug attentional bias task (Stroop test) | Nonclinical | 8 | Visual |
| **Maas et al. 1998** | Cocaine task for brain activity | Comparative, neuroimaging study | N = 12 (n=6 crack, n=6 H) | Crack | Videos | Nonclinical | 6.5 | Visual |
| **Mahoney et al. 2020** | Assessing treatment for cocaine dependence (with the use of cues) | Case study | N = 1 (case study) | Cocaine (and heroin) | Images | Clinical | 4.5 | Visual |
| **Mahoney et al. 2023** | Cocaine task for brain activity | Open-label clinical trial | N = 4 | Opioid | Images and videos | Clinical | 6.5 | Visual |
| **Margolin et al. 1994** | Assessing treatment for cocaine dependence (with the use of cues) | Experimental study | N = 19 | Cocaine | Videos | Clinical | 6.5 | Visual |
| **Marks et al. 2014** | Cocaine task for attentional bias | Between-subject, repeated measures study | N = 30 (m=15 CU, n=15 H) | Cocaine | Drug attentional bias task (Stroop test) and images | Nonclinical | 7 | Visual |
| **Marks et al. 2014** | Cocaine task for attentional bias | Within-subject, repeated measures study | N = 36 | Cocaine | Images | Nonclinical | 6.5 | Visual |
| **Marks et al. 2015** | Cocaine task for eye-tracking | Experimental study | N = 20 | Cocaine | Images | Nonclinical | 7 | Visual |
| **Marks et al. 2015** | Cocaine task for attentional bias | Double-blind, placebo-controlled within-subject study | N = 40 (n=20 CU, n=20 CU + alcohol) | Cocaine | Images | Nonclinical | 6.5 | Visual |
| **Marks et al. 2016** | Cocaine task for attentional bias and  cocaine task for eye tracking | Experimental study | N = 40 (n=20 CU + cigarette, n=20 cigarette) | Cocaine (smoking) | Images | Nonclinical | 6.5 | Visual |
| **Marsden et al. 2018** | Assessing treatment for cocaine dependence (with the use of cues) | External pilot randomised controlled trial | N = 30 | Cocaine | Audiotape and images | Clinical | 7.5 | Visual  Auditory |
| **Martinotti et al. 2022** | Cocaine task for brain activity and  assessing treatment for cocaine dependence (with the use of cues) | Randomised, double-blind, sham-controlled trial | N = 90 (n=42 active rTMS, n=38 sham) | Cocaine | Videos | Clinical | 7 | Visual |
| **Mayer et al. 2016** | Cocaine task for attentional bias | Randomised controlled trial | N = 37 | Cocaine | Images | Nonclinical | 7.5 | Visual |
| **Mayer et al. 2020** | Cocaine task for attentional bias and  to assess medication as part of cocaine treatment | Randomised controlled trial | N = 37 | Cocaine | Images | Nonclinical | 7.5 | Visual |
| **Meneses-Gaya et al. 2021** | Assess cue-induced craving | Randomised, double-blind, placebo-controlled trial | N = 31 | Cocaine | Videos | Clinical | 8 | Visual |
| **Milella et al. 2016** | Cocaine task for brain activity | Experimental neuroimaging study | N = 12 | Cocaine | Paraphernalia, script and videos | Nonclinical | 7 | Visual  Tactile |
| **Milivojevic et al. 2016** | To assess medication as part of cocaine treatment | Randomised, double-blind, placebo-controlled trial | N = 46 | Cocaine | Script | Nonclinical | 8 | Auditory |
| **Milivojevic et al. 2017** | To assess medication as part of cocaine treatment | Randomised, double-blind, placebo-controlled trial | N = 40 | Cocaine | Script | Clinical | 7.5 | Auditory |
| **Milivojevic et al. 2022** | To assess medication as part of cocaine treatment | Randomised, double-blind, placebo-controlled trial | N = 30 | Cocaine | Script | Nonclinical | 8 | Auditory |
| **Modesto-Lowe et al. 1997** | To assess medication as part of cocaine treatment | Randomised, placebo-controlled trial | N = 26 | Cocaine | Videos | Nonclinical | 7 | Visual |
| **Moeller et al. 2009** | Cocaine cues for choice task | Comparative, exploratory study | N = 40 (n=CD, n=20 H) | Cocaine | Drug attentional bias task (picture choice) | Nonclinical | 7 | Visual |
| **Moeller et al. 2010** | Cocaine cues for choice task | Comparative, exploratory study | N = 65 (n=42 CD, n=23 H) | Cocaine | Drug attentional bias task (picture choice) | Nonclinical | 7 | Visual |
| **Moeller et al. 2012** | Cocaine cues for choice task and  cocaine task for brain activity | Comparative, neuroimaging study | N = 91 (n=59 CU, n=32 H) | Cocaine | Images | Nonclinical | 7 | Visual |
| **Moeller et al. 2013** | Gene testing | Comparative, neuroimaging study | N=120 (n=73 CD, n=47 H) | Cocaine | Images and words | Clinical and nonclinical | 7 | Visual |
| **Mongeau-Pérusse et al. 2021** | Assess cue-induced craving | Single-site double-blind randomised controlled superiority trial | N = 78 | Cocaine | Script | Clinical and nonclinical | 7.5 | Auditory |
| **Montgomery et al. 2010** | Cocaine task for attentional bias and  assess cue-induced craving | Double-blind, placebo-controlled trial | N = 72 (n=32 CU, n=40 HC) | Cocaine | Drug attentional bias task (Stroop test) and images | Nonclinical | 7 | Visual |
| **Moran-Santa et al. 2014** | To assess medication as part of cocaine treatment | Double-blind, placebo-controlled cross-over study | N = 62 | Cocaine | Paraphernalia, script and videos | Nonclinical | 7 | Visual  Tactile |
| **Moran-Santa et al. 2015** | To assess medication as part of cocaine treatment | Double-blind, placebo-controlled trial | N = 84 | Cocaine | Paraphernalia | Nonclinical | 7.5 | Visual  Tactile |
| **Moran-Santa et al. 2018** | To assess medication as part of cocaine treatment | Double-blind, placebo-controlled cross-over study | N = 25 | Cocaine | Paraphernalia and recall a memory of cocaine use | Nonclinical | 7.5 | Visual  Auditory  Tactile |
| **Moscon et al. 2016** | Cocaine task for brain activity | Exploratory open trial | N = 18 (n=9 crack users, n=9 HC) | Crack | Paraphernalia and videos | Nonclinical | 6.5 | Visual |
| **Negrete & Emil 1992** | Assess cue-induced craving | Comparative, exploratory study | N = 52 (n=36 CU, n=16 age and gender matched controls) | Cocaine | Images | Clinical | 6.5 | Visual |
| **Parvaz et al. 2016** | Assess cue-induced craving | Laboratory-based, cross-sectional study | N = 76 | Cocaine | Images | Nonclinical | 7 | Visual |
| **Parvaz et al. 2017** | Cocaine task for brain activity and  cocaine task for attentional bias | Comparative neuroimaging study | N = 19 | Cocaine | Images | Nonclinical | 7 | Visual |
| **Parvaz et al. 2021** | Cocaine task for brain activity | Comparative neuroimaging study | N = 58 (n=30 CU, n=28 H) | Cocaine | Images | Nonclinical | 7 | Visual |
| **Penetar et al. 2012** | Assessing treatment for cocaine dependence (with the use of cues) | Within-subject, single-blind study | N = 20 (n=9 CU, n=11 cannabis dependent) | Cocaine | Images and paraphernalia | Nonclinical | 6.5 | Visual  Tactile |
| **Petrakis et al. 1996** | To assess medication as part of cocaine treatment | Randomised, double-blind, cross-over study | N = 20 | Cocaine | Paraphernalia and videos | Clinical | 6.5 | Visual  Tactile |
| **Pettorruso et al. 2019** | Assessing treatment for cocaine dependence (with the use of cues) | Double-blind, sham-controlled, neuro-navigated rTMS study design | N = 20 | Cocaine | Videos | Nonclinical | 6.5 | Visual |
| **Pike et al. 2013** | Assess inhibitory control | Between-subjects study | N = 30 | Cocaine | Images | Nonclinical | 6.5 | Visual |
| **Potenza et al. 2012** | Cocaine task for brain activity | Exploratory neuroimaging study | N = 66 (n=30 CU, n=36 alcohol) | Cocaine | Scripts | Nonclinical | 6.5 | Auditory |
| **Price et al. 2009** | To assess medication as part of cocaine treatment | Randomised, double-blind, placebo-controlled trial | N = 10 | Cocaine | Paraphernalia | Nonclinical | 7.5 | Tactile  Visual |
| **Price et al. 2013** | To assess medication as part of cocaine treatment | Randomised, placebo-controlled laboratory study | N = 32 | Cocaine | Paraphernalia, script and videos | Clinical and nonclinical | 7.5 | Visual  Auditory  Tactile |
| **Prisciandaro et al. 2013** | Cocaine task for brain activity | Random placebo-controlled trial | N = 30 | Cocaine | Images and paraphernalia | Nonclinical | 7.5 | Visual  Tactile |
| **Prisciandaro et al. 2013** | To assess medication as part of cocaine treatment | Random placebo-controlled study | N = 25 | Cocaine | Images | Nonclinical | 8 | Visual |
| **Prisciandaro et al. 2014** | Cocaine task for brain activity | Exploratory neuroimaging study | N = 38 | Cocaine | Images | Clinical and nonclinical | 7 | Visual |
| **Prisciandaro et al. 2014** | Cocaine task for brain activity | Cross-sectional study | N = 41 | Cocaine | Images and paraphernalia | Nonclinical | 6.5 | Visual  Tactile |
| **Ray et al. 2014** | To assess memory recall | Exploratory study | N = 35 (n=14 inpatients, n=21 young adults with limited experience) | Cocaine | Images | Clinical and nonclinical | 6 | Visual |
| **Ray et al. 2015** | Cocaine task for brain activity | Comparative, neuroimaging study | N = 28 (n=15 crack, n=13 H) | Crack | Images | Nonclinical | 6.5 | Visual |
| **Regier et al. 2021** | Cocaine task for brain activity | Neuroimaging study | N = 73 | Cocaine | Images | Clinical | 6.5 | Visual |
| **Reid et al. 1998** | Assess cue-induced craving | Double-blind, randomised, counterbalanced study | N = 22 | Cocaine (recent crack use) | Drug preparation task, paraphernalia, smell and videos | Clinical | 7.5 | Visual  Auditory  Tactile  Olfactory |
| **Reid et al. 1999** | To assess medication as part of cocaine treatment | Double-blind, randomised, counterbalanced design | N = 23 | Crack | Drug preparation task, paraphernalia, smell, and videos | Clinical | 7 | Visual Auditory  Tactile  Olfactory |
| **Reid et al. 2003** | Cocaine task for brain activity | Exploratory, neuroimaging study | N= 24 | Crack | Paraphernalia, script and videos | Clinical | 6.5 | Visual  Auditory  Tactile |
| **Reid et al. 2004** | To assess cocaine induced psychosis | Exploratory study | N = 23 | Cocaine | Paraphernalia, script, smell and videos | Clinical | 6.5 | Visual  Auditory  Tactile  Olfactory |
| **Reid et al. 2006** | Cocaine task for brain activity | Within-subject, cross-over study | N = 13 | Crack | Drug use and paraphernalia | Clinical | 6 | Visual  Tactile  Gustatory |
| **Reid et al. 2008** | Cocaine task for brain activity | Within-subject, cross-over study | N = 13 | Crack | Paraphernalia, script and videos | Nonclinical | 6.5 | Visual  Auditory  Tactile |
| **Reid & Thakkar 2009** | To assess medication as part of cocaine treatment | Randomised, placebo-controlled, within-subjects, crossover study | N = 20 | Crack | Paraphernalia, smell, videos | Nonclinical | 6.5 | Visual  Auditory  Tactile  Olfactory |
| **Renshaw et al. 1999** | Cocaine task for brain activity | Randomised, double-blind, placebo-controlled study | N = 14 | Cocaine | Videos | Nonclinical | 7.5 | Visual |
| **Robbins et al. 1992** | To assess medication as part of cocaine treatment | Randomised, double-blind, placebo-controlled study | N = 20 | Cocaine | Audiotape, drug preparation task and videos | Clinical | 7.5 | Visual  Auditory  Tactile |
| **Robbins et al., 1997** | Assess cue-induced craving | Exploratory study | N = 150 | Cocaine | Audiotape, paraphernalia and videos | Clinical | 7 | Visual  Auditory  Tactile |
| **Robbins et al. 1999** | Assess cue-induced craving | Exploratory study | N = 38 | Cocaine | Audiotape, drug preparation task and videos | Clinical | 6.5 | Visual  Auditory  Tactile |
| **Robbins et al. 2000** | Assess cue-induced craving | Exploratory study | N = 81 | Cocaine | Audiotape, drug preparation task, paraphernalia and videos | Clinical | 6.5 | Visual  Auditory  Tactile |
| **Rohsenow et al. 2004** | Assessing treatment for cocaine dependence (with the use of cues) | Experimental 2 x 2 study | N = 165 | Cocaine | Audiotape | Clinical | 8 | Auditory |
| **Rohsenow et al. 2007** | Assess cue impact on drug use | Exploratory study | N = 163 | Cocaine | Audiotapes | Clinical | 7 | Auditory |
| **Rosse et al. 1994** | To assess medication as part of cocaine treatment | Double-blind, placebo-controlled study | N = 66 | Cocaine | Images | Clinical | 7.5 | Visual |
| **Rosse et al. 1995** | Cocaine task for eye-tracking | Exploratory study | N = 44 | Crack | Images | Clinical | 6.5 | Visual |
| **Rosse et al. 1997** | Cocaine task for eye-tracking | Exploratory study | N = 19 | Crack | Images | Clinical | 6 | Visual |
| **Roy et al. 2002** | Assess the relationship between central monoamine metabolites and craving cocaine | Exploratory study | N = 20 | Cocaine | Videos | Clinical | 6.5 | Visual |
| **Saladin et al. 2006** | To test cocaine cues in virtual reality | Feasibility, exploratory study | N = 11 | Crack | VR drug environments | Nonclinical | 6.5 | Visual  Auditory |
| **Saladin et al. 2013** | To assess medication as part of cocaine treatment | Randomised, double-blind, placebo-controlled study | N = 50 | Cocaine | Paraphernalia and videos | Nonclinical | 7.5 | Visual  Tactile |
| **Santa Ana et al. 2015** | To assess medication as part of cocaine treatment | Randomised, double-blind, placebo-controlled pilot study | N = 47 | Cocaine | Paraphernalia | Clinical and nonclinical | 8 | Visual  Tactile |
| **Satel et al. 1995** | To assess medication as part of cocaine treatment and  assess cue-induced craving | Counterbalanced, double-blind study | N = 25 | Cocaine | Paraphernalia and videos | Clinical | 7 | Visual  Tactile |
| **Scala et al. 2024** | Cocaine task for brain activity | Cross-sectional, neuroimaging study | N = 41 (n=21 ND CU, n=20 controls) | Cocaine | Videos | Nonclinical | 6.5 | Visual |
| **Schlauch et al. 2013** | Assess cue-induced craving | Experimental study | N = 155 | Cocaine | Images | Clinical (criminal) | 7 | Visual |
| **Schulte et al. 2019** | To assess medication as part of cocaine treatment | Randomised, double-blind study | N = 24 | Cocaine snorting only | Images | Nonclinical | 7 | Visual |
| **Sinha et al. 1999** | Assess cue-induced craving | Exploratory study | N = 10 (Study 1), N = 10 (Study 2) | Cocaine | Script | Clinical | 6.5 | Auditory |
| **Sinha et al. 2000** | Assess cue-induced craving | Exploratory study | N = 20 | Cocaine | Script | Clinical | 6.5 | Auditory |
| **Sinha et al. 2003** | Assess cue-induced craving | Exploratory study | N = 54 | Cocaine | Script | Clinical | 6.5 | Auditory |
| **Sinha et al. 2005** | Cocaine task for brain activity | Comparative neuroimaging study | N = 20 | Cocaine | Script | Clinical | 6.5 | Auditory |
| **Sinha et al. 2006** | Assess cue-induced craving | Prospective study | N = 49 | Cocaine | Script | Clinical | 7 | Auditory |
| **Sinha et al. 2007** | Assess cue-induced craving | Exploratory study | N = 19 | Cocaine | Script | Nonclinical | 6.5 | Auditory |
| **Smelson et al. 1997** | To assess medication as part of cocaine treatment | Exploratory study | N = 4 | Cocaine | Videos | Clinical | 6.5 | Visual |
| **Smelson et al. 1998** | Assess cue-induced craving | Exploratory study | N = 14 | Cocaine | Videos | Clinical | 6.5 | Visual |
| **Smelson et al. 2002** | To assess medication as part of cocaine treatment | 6-week, open-label pilot study | N = 18 | Cocaine | Videos | Clinical | 6.5 | Visual |
| **Smelson et al. 2002** | Assess cue-induced craving | Exploratory study | N = 91 | Cocaine | Videos | Clinical | 6.5 | Visual |
| **Smelson et al. 2004** | To assess medication as part of cocaine treatment | Randomised, double-blind, placebo-controlled pilot study | N = 34 | Cocaine | Paraphernalia and videos | Clinical | 7.5 | Visual Tactile |
| **Smelson et al. 2006** | To assess medication as part of cocaine treatment | Randomised, double-blind, placebo-controlled trial | N = 31 | Cocaine | Videos | Clinical | 7.5 | Visual |
| **Smelson et al. 2012** | Assess cue-induced craving and for  gene testing | Exploratory study | N = 34 | Cocaine | Paraphernalia and videos | Clinical | 6.5 | Visual  Tactile |
| **Smelson et al. 2013** | Assessing treatment for cocaine dependence (with the use of cues) | Randomised, double-blind, placebo-controlled trial | N = 101 | Cocaine | Paraphernalia and videos | Clinical | 7.5 | Visual  Tactile |
| **Smith et al. 2014** | Cocaine task for brain activity | Comparative, neuroimaging study | N = 129 (n=27 recreational, n=50 stimulant dependent, n=52 H) | Cocaine | Drug attentional bias task (Stroop test) | Nonclinical | 6.5 | Visual |
| **Smith et al. 2020** | Cocaine task for attentional bias | Comparative, exploratory study | N = 92 (n=40 CD, n=24 abstinent former CD, n=28 HC) | Cocaine | Drug attentional bias task (Stroop test) | Clinical | 6.5 | Visual |
| **Smith et al. 2023** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 72 | Cocaine | Script | Clinical | 6.5 | Auditory |
| **Sokhadze et al. 2008** | Cocaine task for brain activity | Comparative, neuroimaging study | N = 14 | Cocaine | Images | Nonclinical | 6.5 | Visual |
| **Stauffer et al. 2016** | To assess medication as part of cocaine treatment | Experimental, pilot study | N = 22 | Opioid | Videos | Clinical | 7.5 | Visual |
| **Sterling et al. 2004** | Assess cue-induced craving | Experimental, 2 x 4 repeated measures study | N = 81 | Cocaine | Videos | Nonclinical | 7.5 | Visual |
| **Strickland et al. 2016** | Assessing treatment for cocaine dependence (with the use of cues) | Exploratory study | N = 44 | Cocaine | Images | Nonclinical | 7 | Visual |
| **Strickland et al. 2018** | To assess choice in a monetary task | Exploratory study | N = 12 | Cocaine | Images | Nonclinical | 6.5 | Visual |
| **Tap et al. 2024** | Cocaine task for brain activity | Comparative, neuroimaging study | N = 111 (n=57 CU, n=54 controls) | Cocaine snorting only | Images | Nonclinical | 6.5 | Visual |
| **Tull et al. 2011** | Cocaine task for attentional bias | Exploratory 2 x 2 x 2 study | N = 60 (n=30 PTSD, n=30 without PTSD) | Cocaine | Images and script | Clinical | 6.5 | Visual  Auditory |
| **Tull et al. 2016** | Assess cue-induced craving | Exploratory study | N = 42 | Cocaine | Images | Clinical | 6.5 | Visual |
| **Vaccaro et al. 2024** | Cocaine task for brain activity | Comparative, neuroimaging study | N = 103 (n=30 CD, n=28 PG, n=45 control) | Cocaine | Videos | Nonclinical | 6.5 | Visual |
| **Vadhan et al. 2007** | Cocaine task for attentional bias | Comparative, exploratory study | N = 37 (n=17 treatment seeking, n=20 non treatment seeking) | Cocaine | Drug attentional bias task (Stroop test) | Clinical and nonclinical | 6 | Visual |
| **Van de Laar et al. 2004** | Cocaine task for brain activity | Comparative, exploratory study | N = 46 (n=26 CU, n=20 H) | Cocaine | Images | Clinical | 7 | Visual |
| **Verveer et al. 2020** | Assessing treatment for cocaine dependence (with the use of cues) | Randomised, sham-controlled tDCS study | N = 59 | Cocaine | Images | Clinical | 7.5 | Visual |
| **Vincent et al. 2018** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 54 | Cocaine | Images | Nonclinical (criminal) | 6 | Visual |
| **Volkow et al. 2006** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 18 | Cocaine | Videos | Nonclinical | 6.5 | Visual |
| **Volkow et al. 2008** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 20 | Cocaine | Images | Nonclinical | 6.5 | Visual |
| **Volkow et al. 2010** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 24 | Cocaine | Videos | Nonclinical | 6.5 | Visual |
| **Volkow et al. 2010** | Cocaine task for brain activity | Placebo-controlled, cross over, neuroimaging study | N = 24 | Cocaine | Videos | Nonclinical | 6.5 | Visual  Auditory |
| **Volkow et al. 2011** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 26 | Cocaine | Videos | Nonclinical | 7 | Visual |
| **Volkow et al. 2014** | Cocaine task for brain activity | Comparative, neuroimaging study | N = 62 (n=43 CU, n=19 H) | Cocaine | Videos | Nonclinical | 6.5 | Visual |
| **Waldrop et al. 2010** | Assess cue-induced craving | Exploratory study | N = 100 (n=47 controls, n=53 CD) | Cocaine | Paraphernalia and videos | Nonclinical | 7 | Visual  Auditory  Tactile |
| **Wang et al. 2021** | Cocaine task for brain activity | Comparative, neuroimaging study | N = 103 (n=44 CU, n=59 nonusers) | Cocaine | Images | Nonclinical | 7 | Visual |
| **Waters et al. 2012** | Assess cue-induced craving | Exploratory study | N = 68 | Opioid | Drug attentional bias task (Stroop test) | Clinical | 7 | Visual |
| **Webber et al. 2021** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 52 | Cocaine | Images | Nonclinical | 6.5 | Visual |
| **Webber et al. 2021** | Cocaine task for brain activity and cocaine task for eye-tracking | Exploratory, neuroimaging study | N = 43 | Cocaine | Images | Nonclinical | 6.5 | Visual |
| **Wexler et al. 2001** | Cocaine task for brain activity | Comparative, neuroimaging study | N = 32 (n=11 CU, n=21 controls) | Cocaine | Videos | Nonclinical | 6.5 | Visual  Auditory |
| **Wilcox et al. 2011** | Cocaine task for brain activity | Comparative, neuroimaging study | N = 28 (n=14 CU, n=14 = matched controls) | Cocaine | Videos | Nonclinical | 7 | Visual |
| **Wong et al. 2006** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 19 | Cocaine | Audiotape and videos | Nonclinical | 7 | Visual  Auditory |
| **Xu et al. 2013** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 67 | Cocaine | Script | Clinical | 6.5 | Auditory |
| **Young et al. 2014** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 23 | Cocaine (smoking) | Images | Nonclinical | 8 | Visual |
| **Zhang et al. 2019** | Cocaine task for brain activity | Comparative, neuroimaging study | N = 44 (n=20 CD, n=24 H BMI matched controls) | Cocaine | Images | Nonclinical | 7 | Visual |
| **Zhang et al. 2020** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 52 | Cocaine | Images | Nonclinical | 7 | Visual |
| **Zhang et al. 2020** | Cocaine task for brain activity | Exploratory, neuroimaging study | N = 23 | Cocaine | Images | Nonclinical | 7 | Visual |

**\***Jinks et al., 2019 assessment scale for quality appraisal

AD = Alcohol Dependent

BPD = Borderline Personality Disorder

CD = Cocaine Dependent

CU = Cocaine User

GD = Gambling Dependent

H = Healthy

HC = Healthy Control

ND = Non-Dependent

NW = No withdrawal

PG = Problem Gambler

W = Withdrawal