Slide 1: Title Slide: Evidence for Individual Placement and Support (IPS)

Slide 2: Employment is a critical mental health intervention

(Drake & Wallach, 2020)

Slide 3: Why focus on work

(Bond & Drake, 2014)

Slide 4: Positive impact of competitive employment on mental health and well-being in general population

(Modini, Joyce, et al., 2016) Other reviews and research studies: (Blustein, 2008; Butterworth et al., 2015; Pohrt et al., 2021; Waddell & Burton, 2006)

Shorter work week: (Kamerāde et al., 2019)

Slide 5: Positive impact of competitive employment on mental health and well-being for people with serious mental illness

(Drake & Wallach, 2020; Gibbons & Salkever, 2019; Luciano, Bond, & Drake, 2014; Wallstroem et al., 2021). See also: (Bouwmans et al., 2015; Charzyńska et al., 2015; van Rijn et al., 2016).

Slide 6: Negative impact of job loss and extended unemployment

A huge literature documents the negative effects of unemployment. Two reviews are cited here (Paul & Moser, 2009; Roelen et al., 2012). A review article examines the bidirectional relationship between unemployment and physical health (Korpi, 2001).

Slide 7: Unemployment and disability

(Maestas et al., 2018)

Slide 8: People with a mental disability want to work but are not hopeful

(Ali et al., 2011)

Slide 9: Few people with schizophrenia work

(Hakulinen et al., 2020)

Slide 10: Need for effective employment services
60% have interest in employment: (Bedell et al., 1998; Drebing et al., 2004; Frounfelker et al., 2011; Knaeps et al., 2015; Livermore & Bardos, 2017; McQuilken et al., 2003; Mueser et al., 2001; Ramsay et al., 2011; Rogers et al., 1991; Westcott et al., 2015; Woltmann, 2009)

<20% employed: (Lindamer et al., 2003; Pandiani & Leno, 2012; Perkins & Rinaldi, 2002; Rosenheck et al., 2006; Salkever et al., 2007)

Only 2% have access: (Bruns et al., 2016; Twamley et al., 2013).

Slide 11: IPS developed by Becker and Drake

(Becker & Drake, 1993, 2003)

Slides 12: Four trends

Slide 13: Trend 1: Expanding evidence base

Slide 14: Day treatment conversion studies

Convert day treatment to IPS: (Bailey et al., 1998; Becker et al., 2001; Drake et al., 1994; Drake, Becker, et al., 1996; Gold & Marrone, 1998)

Convert sheltered workshop to IPS: (Oldman et al., 2005)

Slide 15: Employment outcomes in day treatment conversion studies

(Bond, 2004)

Slide 16: Other outcomes in day treatment conversion studies

(Clark, 1998; Torrey et al., 1995)

Slide 17: Study characteristics of 28 randomized control trials of IPS

(Bejerholm et al., 2015; Bond, Kim, et al., 2015; Bond, Salyers, et al., 2007; Burns et al., 2007; Christensen et al., 2019; Davis et al., 2018; Davis et al., 2012; Drake et al., 2013; Drake et al., 1999; Drake, McHugo, et al., 1996; Erickson et al., 2021; Gold et al., 2006; Heslin et al., 2011; Hoffmann et al., 2014; Killackey et al., 2019; Killackey et al., 2008; Latimer et al., 2006; Lehman et al., 2002; Michon et al., 2014; Mueser et al., 2004; Nuechterlein et al., 2020; Oshima et al., 2014; Tsang et al., 2009; Twamley et al., 2012; Viering et al., 2015; Waghorn et al., 2014; Wong et al., 2008; Zhang et al., 2017)

For more on these studies: (Brinchmann et al., 2020; Drake et al., 2016)

Slide 18: Summary statistics for RCTs of IPS

Compiled for this powerpoint
Slide 19: Graph of 12 US RCTs of IPS
Graph compiled for this powerpoint

Slide 20: Graph of 16 RCTs of IPS outside US
Graph compiled for this powerpoint

Slide 21: IPS RCTs by continent
Updated from: (Drake et al., 2019)

Slide 22: Overall findings for 28 RCTs
Table compiled for this powerpoint

Slide 23: Systematic reviews of IPS
(Bond, Drake, et al., 2012; Brinchmann et al., 2020; de Winter et al., 2022; Frederick & VanderWeele, 2019; Kinoshita et al., 2013; Marshall et al., 2014; Metcalfe et al., 2018; Modini, Tan, et al., 2016; Suijkerbuijk et al., 2017; Weld-Blundell et al., 2021)

Slide 24: Monthly IPS employment rates
(Bond, Salyers, et al., 2007; Mueser et al., 2004)

Slides 25-26: Other employment outcomes for IPS
(Bond, Campbell, et al., 2012; Bond, Drake, & Becker, 2020)

Slide 27: Job tenure for IPS jobs
(Bond & Kukla, 2011; Hoffmann et al., 2014)

Slide 28: Long-term outcomes (% steady workers) in three IPS studies
(Becker, Whitley, et al., 2007; Hoffmann et al., 2014; Salyers et al., 2004).

Slide 29: Long-term outcomes in Norwegian RCT of IPS
(Holmås et al., 2021)

Slides 30: Long-term outcomes from Mental Health Treatment Study
(Baller et al., 2020)
Not all long-term follow-ups of IPS RCTs have found differences in employment outcomes between IPS and controls. Two studies with no differences both had implementation and methodological issues including high attrition rates (Pichler et al., 2021; Waghorn et al., 2017).

**Slide 31: IPS is effective in diverse locations**

**Slide 32: Competitive employment outcomes for IPS in routine practice**

(Drake et al., 2012)

**Slide 33: Barriers to IPS in rural areas**


**Slide 34: Implementation barriers and strategies in rural areas**

(AI-Abdulmunem et al., 2021; Bond, Al-Abdulmunem, et al., 2022)

**Slide 35: IPS fidelity and employment outcomes similar in urban and rural communities**

(Haslett et al., 2011; Luciano, Bond, Becker, et al., 2014)

**Slide 36: Cost-effectiveness of IPS**

Summarized for this powerpoint

**Slide 37: Cost of IPS**

(Clark et al., 1996; Clark et al., 1998; Dixon et al., 2002; Jordan et al., 2022; Latimer et al., 2004; Salkever, 2013; Shi, 2012).

**Slide 38: IPS cost studies**

(Christensen et al., 2021; Clark, 1998; Clark et al., 1998; Dixon et al., 2002; Heslin et al., 2011; Hoffmann et al., 2014; Knapp et al., 2013; Stroupe et al., 2022; Yamaguchi et al., 2017).

See also see review paper: (Zheng et al., 2022).

**Slide 39: Does IPS have a direct impact on mental health and well-being?**

Summary of literature: (Kukla & Bond, 2013)
Recent exceptions showing a direct impact for IPS: (Drake et al., 2013; Mueller et al., 2019)

**Slide 40: Trend 2: Target subgroups served by IPS**

*People with justice involvement:*

(Bond, Kim, et al., 2015; LePage et al., 2020; LePage et al., 2016)
**Evidence for IPS PowerPoint: Reference List (7/4/22)**

*People receiving disability benefits:*
(Bond, Xie, et al., 2007; Drake et al., 2013; Sveinsdottir et al., 2020; Viering et al., 2015)

*People with mental illness and substance use disorder*
(Harrison et al., 2020; Mueser et al., 2011)

*Homeless people*
(Campbell et al., 2011; Kwan et al., 2021; LePage et al., 2021; Poremski et al., 2017)

**Slide 41: IPS effective across many subgroups**
(Campbell et al., 2011; Campbell et al., 2010)

**Slide 42: Equality of access and outcome for people of color**
(Perkins et al., 2021)
See also: (Bond, Mascayano, et al., submitted)

**Slide 43: Recent focus on employment services for young adults**
Overview: (Bond, Drake, et al., 2022)
WIOA (Mann & Croake, 2018)
Foster care (Ellison et al., 2015)
Coordinated specialty care for first episode of psychosis (Dixon, 2017)

**Slide 44: International focus on young adults not in employment, education, and training**
(Goldman-Mellor et al., 2016; Maraj et al., 2019; Mawn et al., 2017; O'Dea et al., 2014; Ralston et al., 2016)

**Slide 45: Employment rates decline over time after early episode of psychosis**
(Ajnakina et al., 2021)

**Slide 46-47: Evaluations of IPS for young adults**
(Bond, Drake, & Campbell, 2016; Bond, Drake, et al., 2015; Christensen et al., 2019; Ellison et al., 2015; Erickson et al., 2021; Ferguson et al., 2012; Hegelstad et al., 2019; Killackey et al., 2019; Killackey et al., 2008; KPMG, 2019; Noel et al., 2018; Nuechterlein et al., 2020; Rosenheck et al., 2017; Sveinsdottir et al., 2020)

For a review, see: (Bond, Al-Abdulmunem, et al., submitted)

**Slides 48-49: Overall effectiveness of IPS for young adults**
(Bond, Al-Abdulmunem, et al., submitted)

**Slide 50: Trend 3: Expanding IPS to new populations**
Evidence for IPS PowerPoint: Reference List (7/4/22)

(Bond et al., 2019; Bond, Drake, & Pogue, 2020)
See also: (de Winter et al., 2022; Hellström et al., 2021; Probyn et al., 2021)
TANF studies: (Chandler, 2020; Freedman & Millenky, 2022)

Slide 51: 13 RCTs of IPS in new populations

13 RCTs: (Bejerholm et al., 2017; Davis et al., 2018; Davis et al., 2012; Davis et al., 2022; Hellström et al., 2017; LePage et al., 2020; LePage et al., 2016; Lones et al., 2017; Ottomanelli et al., 2014; Reme et al., 2015; Reme et al., 2019; Sveinsdottir et al., 2022; Sveinsdottir et al., 2020)

Slide 52: IPS for people with substance use disorder

IPS-AD: (Marsden et al., 2020)
Norwegian study: (Rognli et al., 2021)
Project BEES: (MDRC, 2021)

Slide 53: Trend 4: Strategies to disseminate, implement, sustain, and expand IPS

(Bruns et al., 2016) (Salkever et al., 2017)

Slides 54: IPS Learning Community

History and current status as of 2020: (Drake, 2020). Current updates: See https://ipsworks.org
See also: (Becker, Baker, et al., 2007; Becker et al., 2014; Becker et al., 2011; Becker et al., 2008; Bond, Drake, et al., 2016b; Bond et al., 2008; Cohen & Becker, 2014; Drake et al., 2006; Swanson et al., 2011; Swarbrick et al., 2017)

Slides 55: Map of IPS Learning Community states and nations

https://ipsworks.org

Slide 56: Growth of IPS Teams in IPS Learning Community in U.S.

Compiled from IPS Employment Center data base

Slide 57: National Growth of IPS (both inside and outside learning community)

(Johnson-Kwochka et al., 2017; Pogue et al., 2022)

Slide 58: IPS Learning Community employment outcomes

https://ipsworks.org
Slide 59: State agency strategies for promoting IPS

(Bond et al., 2021)

Slides 60-61: Comparing state agency strategies and funding for IPS within and outside learning community

(Pogue et al., 2022). See also: (Becker et al., 2022)

Slide 62: IPS fidelity

(Becker et al., 2019; Bond et al., 2011; Bond, Peterson, et al., 2012)

Slide 63: Sustaining IPS services over time

(Bond, Drake, et al., 2016a; Swain et al., 2010)

Slide 64: Quality of Services in IPS Learning Community Improves Over Time

(Bond, Drake, et al., 2016a)

Slide 65-66: International spread

(Becker & Bond, 2020; Bond, Lockett, et al., 2020; Drake, 2020; Jónasson et al., 2022)
IPS programs outside US: (Knutzen, 2020)

Slide 67: Why lower employment rates in Europe?

(Brinchmann et al., 2020; Burns et al., 2007; Metcalfe et al., 2018)

Slide 68: Growth of IPS in the Netherlands

(de Winter et al., 2020)

Slide 69: Growth of IPS in Japan

(Yamaguchi et al., 2020; Yamaguchi et al., 2021)

Slide 70: VR experts rate IPS as highly relevant and highly evidence-based

(Leahy et al., 2018)

Slide 71-72: Overall conclusions and future directions

Slide 73: Contact information
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