Slide 1: Title Slide: Evidence for IPS

Slide 2: Employment is a critical mental health intervention

(Drake & Wallach, 2020)

Slide 3: Why focus on work

(Bond & Drake, 2014)

Slide 4: 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; Waddell & Burton, 2006)

Shorter work week: (Kamerāde, Wang, Burchell, Balderson, & Coutts, 2019)

Slide 5: 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). See also: (Bouwmans, Sonneville, Mulder, & Hakkaart-van Roijen, 2015; Charzyńska, Kucharska, & Mortimer, 2015; van Rijn, Carlier, Schuring, & Burdorf, 2016).

Slide 6: 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, Mullen, & Strand, 2018)

Slide 8: Few people with serious mental illness work

(Hakulinen et al., 2019)
Slide 9: Need for employment services

*Interest in employment:* (Bedell, Draving, Parrish, Gervey, & Guastadisegni, 1998; Drebing et al., 2004; Frounfelker, Wilkniss, Bond, Devitt, & Drake, 2011; Knaeps, Neyens, van Weeghel, & Van Audenhove, 2015; Livermore & Bardos, 2017; McQuilken et al., 2003; Mueser, Salyers, & Mueser, 2001; Ramsay et al., 2011; Rogers, Walsh, Masotta, & Danley, 1991; Westcott, Waghorn, McLean, Statham, & Mowry, 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, Baker, Norman, Lohr, & Resnick, 2013).

Slide 10: IPS developed by Becker and Drake

(Becker & Drake, 1993, 2003)

Slides 11: Four trends

Slide 12: Trend 1: Expanding evidence base

Slide 13: Day treatment conversion studies

*Convert day treatment to IPS:* (Bailey, Ricketts, Becker, Xie, & Drake, 1998; Becker et al., 2001; Drake et al., 1994; Drake, Becker, Biesanz, Wyzik, & Torrey, 1996; M. Gold & Marrone, 1998)

*Convert sheltered workshop to IPS:* (Oldman, Thomson, Calsaferri, Luke, & Bond, 2005)

Slide 14: Employment outcomes in day treatment conversion studies

(Bond, 2004)

Slide 15: Other outcomes in day treatment conversion studies

(Clark, 1998; Torrey, Becker, & Drake, 1995)

Slide 16: Randomized controlled trials of IPS

For list of studies: (Brinchmann et al., 2020; Drake, Bond, Goldman, Hogan, & Karakus, 2016)
Slide 17: Study characteristics of 28 randomized control trials of IPS

(Bejerholm, Areberg, Hofgren, Sandlund, & Rinaldi, 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, Becker, Anthony, & Clark, 1996; Erickson, Roes, Digiacomo, & Burns, 2020; P. B. Gold et al., 2006; Heslin et al., 2011; Hoffmann, Jäckel, Glauser, Mueser, & Kupper, 2014; Killackey et al., 2019; Killackey, Jackson, & McGorry, 2008; Latimer et al., 2006; Lehman et al., 2002; Michon et al., 2014; Mueser et al., 2004; Nuechterlein et al., 2020; Oshima, Sono, Bond, Nishio, & Ito, 2014; Tsang, Chan, Wong, & Liberman, 2009; Twamley et al., 2012; Viering et al., 2015; Waghorn, Dias, Gladman, Harris, & Saha, 2014; Wong et al., 2008; Zhang et al., 2017)

Slide 18: Summary statistics for RCTs of IPS

Compiled for this powerpoint

Slide 19: Graph of 28 RCTs

Graph compiled for this powerpoint

Slide 20: Overall findings for 28 RCTs

Slide 21: Monthly IPS employment rates

(Drake et al., 2013)

Slides 22-23: Other employment outcomes for IPS

(Bond, Campbell, & Drake, 2012; Bond, Drake, & Becker, 2020)

Slide 24: Job tenure for IPS jobs

(Bond & Kukla, 2011; Hoffmann et al., 2014)

Slide 25: Long-term outcomes (% steady workers) in three IPS studies

(Becker, Whitley, Bailey, & Drake, 2007; Hoffmann et al., 2014; Salyers, Becker, Drake, Torrey, & Wyzik, 2004)

Slide 26: Long-term outcomes in Norwegian RCT of IPS

(Holmås, Monstad, & Reme, 2021)
Slides 27-29: Long-term outcomes from Mental Health Treatment Study

(Baller et al., 2020)

Slide 30: IPS effective in diverse locations

Slide 31: Barriers to IPS in rural areas


Slide 32: Implementation barriers and strategies in rural areas

(Al-Abdulmunem, Drake, & Carpenter-Song, 2021)

Slide 33: IPS fidelity and employment outcomes similar in urban and rural communities

(Haslett, Bond, Drake, Becker, & McHugo, 2011; Luciano, Bond, Becker, & Drake, 2014)

Slide 34: IPS RCTs by continent

(Drake, Becker, & Bond, 2019)

Slide 35: Why lower employment rates in Europe?

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

Slide 36: Systematic reviews of IPS

(Bond, Drake, & Becker, 2012; Brinchmann et al., 2020; Frederick & VanderWeele, 2019; Kinoshita et al., 2013; Marshall et al., 2014; Metcalfe et al., 2018; Modini, Tan, et al., 2016; Suijkerbuijk et al., 2017)

Slide 37: Cost-effectiveness of IPS

Summarized for this presentation

Slide 38: IPS cost studies

(Christensen, Kruse, Hellström, & Eplov, 2021; Clark, 1998; Hoffmann et al., 2014; Knapp et al., 2013; Stroupe et al., submitted)
Slide 39: Does IPS have a direct impact on mental health and well being?

Summary of literature: (Kukla & Bond, 2013)

Recent exceptions: (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)

People receiving disability benefits:
(Bond, Xie, & Drake, 2007; Drake et al., 2013; Sveinsdottir et al., 2016; Viering et al., 2015)

People with mental illness and substance use disorder
(Harrison, Krieger, & Johnson, 2019; Mueser, Campbell, & Drake, 2011)

Homeless people
(Campbell, Bond, & Drake, 2011; LePage et al., 2021; Poremski, Rabouin, & Latimer, 2017)

Slide 41: Equality of access and outcome for people of color

(Perkins, Patel, Willett, Chisholm, & Rinaldi, 2021)

Slide 42: IPS effective across many subgroups

(Campbell et al., 2011; Campbell, Bond, Drake, McHugo, & Xie, 2010)

Slide 43: Recent focus on employment services for young adults

WIOA (Mann & Croake, 2018)
Foster care (Ellison et al., 2015)
Coordinated specialty care for first episode of psychosis (Azrin, Goldstein, & Heinssen, 2015)

Slide 44: Evaluations of IPS for young adults

(Bond, Drake, & Campbell, 2016; Bond, Drake, & Luciano, 2015; Christensen et al., 2019; Ellison et al., 2015; Erickson et al., 2020; Ferguson, Xie, & Glynn, 2012; Hegelstad, Joa, Heitmann, Johannesen, & Langeveld, 2019; Killackey et al., 2019; Killackey et al., 2008; Noel et al., 2018; Rosenheck et al., 2016; Sreihari et al., 2015; Sveinsdottir et al., 2020)
Slide 45: International focus on young adults not in employment, education, and training

(Arulampalam, Gregg, & Gregory, 2001; Kaye, Jans, & Jones, 2011; Mawn et al., 2017; O'Dea et al., 2014; Ralston, Feng, Everington, & Dibben, 2016; Scott et al., 2013)

Slide 46: Goals of young adults with first episode of psychosis

(de Waal, Dixon, & Humensky, 2018)

Slide 47: Trend 3: Expanding IPS to new populations

(Bond, Drake, & Pogue, 2019, 2020)

Recent TANF study: (Chandler, 2020)

Slide 48: 9 RCTs of IPS in new populations

9 RCTs: (Bejerholm, Larsson, & Johanson, 2017; Davis et al., 2018; Davis et al., 2012; Hellström et al., 2017; LePage et al., 2016; Lones et al., 2017; Ottomanelli, Barnett, & Goetz, 2014; Reme, Grasdal, Løvvik, Lie, & Øverland, 2015; Reme et al., 2019)

Slide 49: Recent RCTs of IPS in other populations

(Freedman, Elkin, & Millenky, 2019; Holmås et al., 2021; Juurlink et al., 2020; Sveinsdottir et al., 2020)

Slide 50: IPS for people with substance use disorder

IPS-AD: (Marsden et al., 2020)

Norwegian study: (Rognli et al., submitted)

Project BEES: (MDRC, 2021)

Slide 51: Job loss during COVID pandemic

22% of Americans lost jobs (Bizouati-Kennedy, 2021)

IPS for displaced workers (Drake, Sederer, Becker, & Bond, 2021)
Slide 52: Trend 4: Strategies to disseminate, implement, sustain, and expand IPS

(Becker, Baker, et al., 2007; Becker, Drake, & Bond, 2014; Becker et al., 2011; Becker, Lynde, & Swanson, 2008; Bond, Drake, Becker, & Noel, 2016b; Bond, McHugo, Becker, Rapp, & Whitley, 2008; Cohen & Becker, 2014; Drake, Becker, Goldman, & Martinez, 2006; Swanson et al., 2011; Swarbrick et al., 2017)

Slides 53: IPS Learning Community

(Drake, Becker, & Bond, 2020)

Slides 54: Map of IPS Learning Community states and nations

https://ipsworks.org

Slide 55: Growth of IPS Teams in US

Compiled from IPS Employment Center data base

Slide 56: State agency strategies for promoting IPS

(Bond, Johnson-Kwochka, et al., 2020)

Slide 57: Comparing state agency strategies within and outside learning community

(Pogue, Bond, Drake, Becker, & Logsdon, 2021)

Slide 58: Comparing funding for IPS within and outside learning community

(Pogue et al., 2021)

Slide 59: Comparing growth of IPS within and outside learning community

(Johnson-Kwochka, Bond, Drake, Becker, & Greene, 2017; Pogue et al., 2021)

Slide 60: IPS Learning Community employment outcomes

https://ipsworks.org

Slide 61: Benchmark for good quarterly competitive employment outcome

(Drake, Bond, & Becker, 2012)
Slide 62: Impact of pandemic on employment outcomes in IPS Learning Community

Compiled for this powerpoint

Slide 63: IPS fidelity

(Becker, Swanson, Reese, Bond, & McLeman, 2019; Bond, Becker, & Drake, 2011; Bond, Peterson, Becker, & Drake, 2012)

Slide 64: Sustaining IPS services over time

(Bond, Drake, Becker, & Noel, 2016a)

Slide 65: IPS Learning Community infrastructure, fidelity, and outcomes

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

Slide 66-67: International spread

(Becker & Bond, 2020; Bond, Lockett, & van Weeghel, 2020; Drake, 2020)

IPS programs outside US: (Knutzen, 2020)

Slide 68: Growth of IPS in the Netherlands

(de Winter, Couwenbergh, van Weeghel, Bergmans, & Bond, 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: Overall conclusions

Slide 72: Contact information
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