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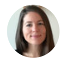
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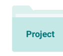

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Original Article

Aspects of control and substance use among middle-aged and older adults with bipolar disorder

Marissa N. Stalman,[1] Sarah L. Canham,[2] Atiya Mahmood,[1] David King[3] and Norm O'Rourke[4]

[1]*Department of Gerontology, Simon Fraser University,* [2]*Gerontology Research Centre, Simon Fraser University,* [3]*Department of Psychology, University of British Columbia, Vancouver, British Columbia, Canada, and* [4]*Department of Public Health, Center for Multidisciplinary Research in Aging, Ben-Gurion University of the Negev, Be'er Sheva, Israel*

ABSTRACT: *High prevalence rates of alcohol and substance use disorders have been reported among persons with bipolar disorder (BD). In the present study, we explored the daily experiences of middle-aged and older adults living with BD who reported regular substance use and the ways in which participants expressed 'control' in relation to their use of alcohol and other substances. Semistructured, in-depth interviews were conducted with 12 participants (nine women and three men), aged 36–57 years of age (mean = 49 years). Thematic analyses identified emergent themes and patterns in participants' life histories. The theme of 'control' emerged as central to participants' reports, and was organized into four categories: (i) substance use to control BD symptoms; (ii) substance use provides a sense of being in control; (iii) methods of controlled substance use; and (iv) not having control: overreliance on substances. Implications of the present study include the need for nurses to openly discuss the use of alcohol and other drugs with persons with BD, provide health information and screening, and determine whether persons with BD feel they have control over their substance use. Several lines of research with persons who have BD and use substances are suggested.*

KEY WORDS: *bipolar disorder, control, middle-aged adult, nurse, older adult, substance use.*

INTRODUCTION

The myth that bipolar disorder (BD) 'burns out' in the second half of life (Kennedy 2008) might contribute to the lack of evidence collected on this illness among middle-aged and older adults. Research suggests that, relative to depression and schizophrenia, significant gaps remain in our understanding of BD in later life (Depp & Lebowitz 2007; King & O'Rourke 2016). Yet in the future, the total number of older persons living with BD will increase as the population continues to age (Dols *et al.* 2014). BD in older adults has been associated with high rates of medical comorbidity, premature mortality, and reduced quality of life when compared to younger persons with BD (Depp & Jeste 2004; Dols *et al.* 2014), and is characterized by significant depressive symptoms (Nivoli *et al.* 2014).

Because of the reduced lifespan and medical comorbidity that accompany BD, it has been argued that persons as young as 50 years of age with BD should be categorized as having older-age BD (Sajatovic *et al.* 2015). Westman *et al.* (2013) also found that, compared to the general population, persons with BD die approximately 10 years earlier. Thus, in keeping with previous

Correspondence: Marissa N. Stalman, Department of Gerontology, Simon Fraser University, 2800-515 W. Hastings Street, Vancouver BC V6B 5K3, Canada. Email: m_stalman@sfu.ca
Marissa N. Stalman, BSN.
Sarah L. Canham, PhD.
Atiya Mahmood, PhD.
David King, PhD.
Norm O'Rourke, PhD, RPsych.
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research, we define persons aged ≥50 years of age as 'older adults' (Depp & Jeste 2004; Sajatovic *et al.* 2015).

BACKGROUND

High lifetime prevalence rates of alcohol (48.5%) and substance (43.9%) use disorders have been reported among persons with BD (Cassidy *et al.* 2001), and 29% of older adults with BD have been found to have a substance use disorder (Sajatovic *et al.* 2006a). Yet Bartels *et al.* (2006) suggest that many older adults who experience problematic alcohol consumption do not meet diagnostic criteria. Thus, there is a significant amount of substance use that remains undetected and unexamined by research that emphasizes clinical diagnoses. Furthermore, with more permissive attitudes towards substance use among those entering later life (e.g. baby boomers), substance use, substance use disorders, and treatment among those in mid-to-late life is predicted to continue increasing in the general population (Arndt *et al.* 2011; Han *et al.* 2009, 2016). Among one sample of older adults diagnosed with BD, nearly 32% reported use of six or more medications (polypharmacy), while close to 25% and 14% reported lifetime alcohol dependence and abuse, respectively (Dols *et al.* 2014). The potential for drug interaction is an important consideration in the context of polysubstance use.

Beyond the potential for dangerous interactions between prescribed medications and alcohol and other drugs, there is also evidence that substance use impacts BD symptomology and quality of life. Persons with BD and comorbid substance abuse report more psychiatric hospitalizations (Hoblyn *et al.* 2009), inconsistent medication adherence (Goodwin & Jamison 2007; Murray & Lopez 1997), and worse clinical and psychosocial treatment outcomes (Goldberg *et al.* 1999). Moreover, long-term substance abuse is believed to hasten cognitive decline, which could be one factor precipitating cognitive loss in later-life BD (Goodwin & Jamison 2007; Murray & Lopez 1997).

Despite these factors, research is limited on why substance misuse is so pervasive among adults with BD. While some contend that persons with BD use substances to manage their symptoms, others suggest that recklessness, impaired judgment, and impulsivity due to mania lead to drug and alcohol use (Schaffer *et al.* 2006). To build on our limited knowledge in this area, the present exploratory study examines the current and lifetime experiences, meanings, and interpretations of substance use among a sample of middle-aged and older adults with BD.

Increasing age and declining health can compromise an individual's ability to feel in control of their daily lives (Hall *et al.* 2010), and symptoms of BD can lead to feelings of being out of control (Crowe *et al.* 2012). Although issues of control among persons with BD have not been the focus of much research attention to date, the concept of 'control' did emerge from our analyses underscoring the importance of managing life with BD. Research exploring the lived experiences of persons with BD has previously documented that BD symptoms are indeed 'difficult to control' (Van den Heuvel *et al.* 2015, p. 805). While extant literature indicates that persons with BD feel out of control as a result of feeling overwhelmed by their symptoms, a loss of autonomy for needing to adhere to a medication regime, and frequent interactions with the health-care system (Crowe *et al.* 2012), methods that persons with BD use to maintain, regain, or enhance control have not been fully explored. Control is, however, integral to wellness with BD. For instance, proper nutrition, good sleep hygiene, and regular exercise and socialization are common self-management strategies that persons with BD use to better control their moods, behaviours and overall wellness (Michalak *et al.* 2016; Murray *et al.* 2011). Planning in advance for fluctuating mood states has also been identified as an important tactic (Michalak *et al.* 2016; Murray *et al.* 2011). Here, we present findings that offer insight into some of the ways in which persons with BD use alcohol and other substances in an attempt to control their BD symptoms, how substance use provides a sense of being in control, methods of controlled substance use, and feeling not in control (i.e. overreliance on substances).

METHODS

Participants

Participants were purposefully recruited from a database of adults who had participated in a Web-based study of mental health and wellness with BD (O'Rourke *et al.* 2016). Selection criteria included: (i) current, regular alcohol or other drug use; (ii) BD diagnosis; and (iii) permission to contact and an email address. Prospective participants were emailed an invitation to participate in the current study, and interested persons replied by email to the research team with their contact details and preferred time of contact.

The 12 participants included five with BD II, four with BD I, two with BD not otherwise specified (NOS), and one with cyclothymia (American

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Psychiatric Association, 2013; Table 1). Nine were women and three were men; the participants ranged in age from 36 to 57 years (mean=49 years). The participants resided in Canada (n = 6), the USA (n = 2), South Africa (n = 2), Australia (n = 1), and New Zealand (n = 1). Substance preference varied among participants, but included alcohol (n = 7), marijuana (n = 2), alcohol and marijuana (n = 1), and methylphenidate (or Ritalin) and marijuana (n = 1), and crack cocaine (n = 1). All participants provided informed consent to participate, agreed to have their interview digitally recorded, and were provided an honorarium upon completion of the interview. Ethics approval was obtained from The Simon Fraser University Institutional Review Board at Burnaby, British Columbia, Canada. Pseudonyms are used to protect the identities of participants.

Data collection

Interviews lasting 47–92 min were conducted by telephone or Skype over the course of 1 year. In order to access participants' experiences, meanings, and interpretations of substance use over their lives, we developed a semistructured, in-depth interview guide informed by previous substance use and BD research and extant literature. Some example questions were: 'I'd like you to tell me the story of your life, however you'd like to tell it, whatever happened along the way', 'I'd like you to tell me how alcohol and drug use fits into your life history', 'Can you describe your theories about the link between your substance use and BD?', and 'If you were to tell the research community one or two things about how persons with BD use alcohol and other drugs, what would you tell them?'. In-depth, probing questions were used to provide further insight into how participants conceptualized their use of alcohol and other drugs (Kvale 2008). Open-ended responses were audio-recorded and transcribed verbatim; transcripts were de-identified to ensure confidentiality, and entered into the NVivo qualitative software programme (QSR International, Melbourne, Vic., Australia) where data were coded and managed.

TABLE 1: *Participant demographics*

Pseudonym	Country	Sex	Age (years)	BD type	Preferred substance
Matt	Canada	Male	51	Cyclothymia	Alcohol
Mark	USA	Male	54	BD II	Ritalin/ marijuana
Luke	Australia	Male	36	BD NOS	Alcohol
Fran	Canada	Female	48	BD II	Crack cocaine
Nina	Canada	Female	45	BD II	Marijuana/ alcohol
Beth	Canada	Female	43	BD II	Alcohol
Anne	Canada	Female	40	BD I	Marijuana
Lisa	Canada	Female	55	BD II	Alcohol
Sara	South Africa	Female	56	BD I	Alcohol
Dana	South Africa	Female	51	BD I	Alcohol
Jane	New Zealand	Female	57	BD NOS	Marijuana
Edie	USA	Female	54	BD I	Alcohol

BP, bipolar disorder; NOS, not otherwise specified.

Data analyses

Two trained qualitative researchers independently conducted thematic analyses of data (Braun & Clarke 2006; Patton 2002) to organize and identify emergent themes and patterns in participants' life histories. Analyses began with a read through of each transcript for general and potential meanings. An initial coding framework was created based on initial low-level descriptive coding that resulted from coding units of text as themes by labelling these units with a word or phrase closely related to the participant's account (Boyatzis 1998). Through an iterative process of reading and rereading the text, codes were subject to constant comparative analysis to further refine the interpretation and definition of themes, the coding framework, and the patterns and relationships across codes (Boeije 2002; Braun & Clarke 2006). The result was a detailed coding framework that was agreed upon by both researchers. Eight of the 12 participants reported on aspects of control, or lack thereof, and we explored how the construct was woven throughout participants' lived experience of substance use and BD.

FINDINGS

Themes of control emerged from our analyses and were organized into four groupings: (i) substance use to control BD symptoms; (ii) substance use provides a sense of being in control; (iii) methods of controlled substance use; and (iv) not having control: overreliance on substances.

Substance use to control BD symptoms

An overarching objective of participants' substance use was to control their BD symptoms. The substance type

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most commonly used was alcohol, followed by marijuana. Nina (age 45 years, BD II, Canada) stated: 'I use (marijuana) to control the feelings I've got no control over'. When asked how she felt when she smoked marijuana, Nina illustrated the duality of having some versus no control over her body:

> It calms me down right away. I feel a little more grounded, because sometimes when my anxiety and my thoughts get away from me I don't feel like I'm in my body…I feel like I'm bouncing around all over the place.

Matt (age 51 years, cyclothymia, Canada) described using alcohol to control his BD symptoms, which included insomnia, lack of motivation and long-term, almost daily, suicidal thoughts. Although Matt reported that he would cycle through manic and depressed states, it was when he was depressed that he used alcohol almost daily. He offered this rationale for his drinking: 'The reason I do it is because the alcohol numbs me, so that the pain is easier to live with'. Matt believed that alcohol intoxication prevented him from acting on his suicidal ideations:

> A lot of it is to drown out the suicidal thoughts, because sometimes they get so overpowering and…I have no way of shutting them off except for with alcohol, because I know once I sit down and start drinking, I'm just too lazy to do anything; I'm not going to do it.

Beth (age 43 years, BD II, Canada) described her symptoms of mania:

> Being manic is an itch, like a nasty, ouchie scratch on my head. Like if you've ever had poison ivy and you scratched it too hard and it hurt. It's a sharp itchiness between me and the world, and I'm agitated, and I can't calm down, and I'm like, 'Go, go, go, go' just to burn it off, and nothing will get rid of it…it's like gas.

Beth explained how alcohol relieved her symptoms:

> If I can have those three drinks, or actually just even two drinks, then all of the sudden that itch goes away and it's just kind of fuzzy and I can take a deep breath.

Edie (age 54 years, BD NOS, New Zealand) reported increased control over her BD symptoms by supplementing her prescription medications with alcohol. She reported drinking because her BD symptoms were inadequately managed by prescription medications alone:

> I'm frequently depressed, and sometimes I'm just wired up and high, and the medication isn't cutting it, it's just not doing enough, and so I'm drinking.

When asked about her theories about the link between BD and substance abuse, Edie described her use of alcohol:

> For me, personally, I would say it's a supplement to prescribed medication, and one that, potentially, a person can be in control of.

Substance use provides a sense of being in control

Some participants reported feeling a sense of being in control as a result of their substance use. When Sara (age 56 years, BD I, South Africa) was asked whether her alcohol use varied across mood states, she stated:

> Not really. It's pretty consistent. My feeling is that because there have been periods in my life where I've abused alcohol and periods in my life where I haven't had anything to drink at all, and it feels like a response to trying to level out, trying to do something that the medication isn't doing….When the meds don't have quite a handle on it, you can take the reins yourself and do something.

Sara suggested that alcohol gave her a sense of control when her prescription medications did not sufficiently manage her BD symptoms. Similarly, Edie reported being more in control with alcohol than her prescribed medications:

> It's not like taking a pill, because a pill, once you take it, you're in for the ride…you can't say, 'I'm not going to take any more of this pill because I don't like the way it's making me feel'. Once you take the pill, you're in for whatever experience you're going to have with it until it's out of your system, and alcohol isn't that way. If I don't like the way I'm feeling, I can stop. It's controlled.

For Fran (age 48 yeas, BD II, Canada), being in control was related to her use of cocaine:

> I'm not a basket case. I mean, I'm a drug addict, and that's horrible, but believe it or not, it's kind of strange, I'm more in control doing (cocaine) than I would be not doing drugs.

Methods of controlled substance use

Some participants described methods employed to maintain control over their substance use using verbs such as 'monitor', 'measure', 'pace', and 'maintain'. When Beth was asked if she had ever been hospitalized because of her substance use, she stated: 'No way,

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because I measure the stuff'. She reported that she was 'tightly controlled' in her alcohol use and would 'Google it all' in order to find out the alcoholic and caloric content of every beverage she consumed. Beth stated:

> I can tell you exactly; I measure every drink I have. If I have hard alcohol in the house, I measure it so precisely to the last shot, the bottle's empty.

Similarly, Matt explained his controlled alcohol consumption:

> I don't binge. Well, I don't drink quickly. I will pace it out all evening…my goal with drinking is not to get drunk. It's to keep myself numb, and I've noticed I drink faster at the beginning of the evening. By the end of the evening, I'm drinking much slower because I've achieved a sort of mindset that I want, and I'm just drinking to maintain it.

Other participants described methods of controlling their alcohol consumption by drinking only after a specific time of day or by only consuming certain beverages (e.g. drinking wine, but not liquor). When asked if she had personal methods to keep her from drinking one bottle of wine, as opposed to the three she consumed in an average day in the past, Lisa (age 55 years, BD II, Canada) explained:

> I do. I will start drinking later. The beer and wine stores close at 11 (P.M.), so I will start drinking, say, at 10 (P.M.). At 11 o'clock I still have quite a lot of wine, and I know that I can't get any more then after that.

Sara's method of having control over her alcohol use was to stay away from hard liquor: 'I don't drink vodka or whiskey or brandy or anything like that. I only drink wine'.

Not having control: Overreliance on substances

Overreliance on substances was recognized as problematic by participants who reported that they no longer had control over their substance use. Although Beth reported methods of controlled alcohol use, she also described a lack of control over her drinking. She explained the lengths to which she would go to obtain alcohol:

> I have no control…I need those drinks. If it's that time and I haven't (had those drinks), nothing would get in the way. I would move Heaven and Earth.

This lack of control reported by some participants is reflected in descriptors they ascribe to themselves as being alcoholics and addicts, as Fran did. When Beth was asked how she would define being an alcoholic, she described how her drinking interfered with her life:

> Not having control. Not being able to say, 'I want a drink, but you know what? I've got shit to do, so I can't'. No, it doesn't matter what I have to do, what's going on. If I'm at a point – and it doesn't happen often – but if I'm at a point where it's like I need a drink, then no. You can't drive, you can't do stuff if you're drinking…I've got to say, 'Well, I'm not going to go swimming tonight' or 'I've got to have someone take (my daughter) to her hockey game tonight because I need to have a drink'. That's what I mean. I reorganize stuff just to get that stupid drink. That's alcoholism.

When Dana (age 51 years, BD I, South Africa) was asked how her life would be without alcohol, she stated: 'I believe that alcohol controls me. My dependency on it irritates me'. Dana also reported that she wanted to 'get rid' of using alcohol, and explained, 'It's like the sea and fire; it's a good servant, but a bad master, and I hate being controlled'.

The complexity of not having control over her substance abuse and recognition of the harm caused by substance use was summed up by Fran:

> Even though we're trying to help ourselves soothe whatever is ailing us mentally, emotionally, or psychologically, we're hurting ourselves further, and we even know that, and yet we still do it.

DISCUSSION

The present, exploratory study found the concept of control to be woven throughout the lived experiences of participants with BD who reported alcohol and other substance use. Participants described their use of alcohol and other drugs as an attempt to manage BD symptoms, suggesting that participants felt they had the ability to control their symptoms and manage their feelings. Previous research has reported that persons with BD use alcohol and other drugs to self-medicate (Canham *et al.* 2017). Participants in the current study also reported supplementing prescription medications with alcohol to feel more in control. This builds upon research which has found those with BD, who do not adhere to their medication regimens, to more frequently report alcohol and drug abuse (Montes *et al.* 2013). They are also more likely to have a substance use disorder (Sajatovic *et al.* 2006b) compared to

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persons who take their medications as prescribed. Future research should continue this line of exploration to determine how control and prescription medication adherence affect alcohol and other substance use among persons with BD.

Persons with BD have reported 'life as chaotic and unstable', being 'unable to change or influence their illness', with 'circumstances being out of their control' (Lim *et al.* 2004, p. 813). In research with adults diagnosed with BD who felt out of control and overwhelmed by their BD symptoms, pharmacology was identified as the only way to manage BD symptoms (Crowe *et al.* 2012; Lim *et al.* 2004). However, these studies excluded those with a history of substance abuse or dependence. Our second theme related to 'control' builds upon these previous findings by suggesting that alcohol and other drug use also provides some persons with BD with a general sense of being in control.

Participants in the current study described a number of methods to control their substance use, such as choosing beverages with lower alcohol content or relegating substance use to specific times of the day. Similar 'habit-management behaviours' among drug users have been previously documented, such as not using drugs while at work, altering the route of drug administration, or switching choice of drugs (Boeri *et al.* 2006).

While we did not set out to explore participant loci of control, descriptions of the methods used by some to control their substance use hinted at internal loci of control (Rotter & Mulry 1965). Someone with an internal locus of control believes they have power to affect their life, while someone with an external locus of control feels their life is determined by forces beyond their control (Rotter & Mulry 1965). More research is needed to explore how locus of control might be a factor in substance use for persons with BD, as well as whether middle-aged and older adults with BD who use alcohol and other substances have a more internal locus of control than the general aging population.

The final theme of 'not having control' and overreliance on substances involved feeling controlled by substances, and self-labelling as alcoholics or addicts. Such reports of impaired control align with clinical definitions of substance use disorders (American Psychiatric Association, 2013). Moreover, individual factors, such as having a comorbid psychiatric disorder, could affect one's ability to control substance use (Carter *et al.* 2014).

These explorations of personal perceptions of control and substance use should inform ongoing dialogue regarding substance abuse treatment. Fanton *et al.* (2013) explained that traditional abstinence-based methods of substance use treatment are rooted in the belief that alcoholism is a disease, and therefore alcoholics must abstain from all psychoactive substances as part of cessation and relapse prevention. According to Marlatt *et al.* (2001), however, 'traditional models of service delivery offer little, if any, help to people who may not choose abstinence as a goal (p. 13)'. Alternatively, a harm-reduction perspective towards substance abuse treatment promotes any positive change, including drug replacement and reduced consumption (Fanton *et al.* 2013; Marlatt *et al.* 2001). While proponents of abstinence-based treatment models believe substance use is entirely unmanageable, advocates of harm-reduction models posit that addiction is behavioural and can be controlled (Fanton *et al.* 2013).

Traditional abstinence-based substance abuse treatment models might not be applicable to persons with BD. Harm-reduction models might be more appropriate. However, as there is a gap in the literature regarding treatment outcomes for middle-aged and older adults with comorbid BD and substance use disorder, there is a need for more empirical evidence before concrete recommendations can be made regarding specialized treatment programmes or models.

Limitations

The possibility of self-selection bias in our sample is one limitation of the current study. Our participants might have been more open to talking about mental health and substance use compared to persons who chose not to participate. Thus, the perceptions of persons with BD who are less open or more suspicious of talking to a researcher have not been captured here. Similarly, participants needed Internet access to be recruited, and so the perspectives of adults with BD who do not use or have access to the Internet are lacking. These self-report data are also limited in that objective corroborating data was unavailable for verification purposes. Lastly, we did not explore cultural variations in participants' experiences, meanings, or interpretations, although there are likely differences that result from national and local policies and cultural and societal attitudes around substance use and acceptability (e.g. marijuana laws).

Limitations notwithstanding, the present research is strengthened by the use of in-depth and probing questions. As well as this, our participants were recruited from the community, rather than a clinical setting, the

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primary data source for previous work in this area (Goldberg *et al.* 1999; Sajatovic *et al.* 2004), enabling insight into the lived experiences of persons who might not be captured by mental health services (Crowe *et al.* 2012). For instance, a subset of adults with BD self-medicate with marijuana and actively avoid clinical contact (O'Rourke *et al.* 2016).

CONCLUSION

Several lines of research among middle-aged and older persons with BD who use alcohol and other drugs are needed to build upon this work. Future research should examine the perceptions and experiences of control among persons with BD who use alcohol and other substances, explore whether different mood states experienced by persons with BD influence their locus of control and how this might change when persons are under the influence of psychoactive substances, explore how persons with BD who use substances view their ability to control their substance use and how this evolves over the life course, and aim to understand how BD affects the perceived experience of control in later life.

Relevance for clinical practice

Based on the findings from the present, exploratory study and the considerable evidence of health risks associated with long-term alcohol and other drug use, nurses should openly discuss the use of alcohol and other drugs with patients of all ages, as well as determine whether or not persons with BD feel they have control over their substance use. Substance use health information and screening are needed for patients across all levels of use to reduce the negative outcomes and injury that result from substance misuse. Moreover, nurses should discuss prescription drug use with their patients to understand regimens of medication adherence, while also assessing for potential medication and drug interactions. In maintaining evidence-based practice, nurses should inquire and learn about the different substance abuse treatment models and potential outcomes for middle-aged and older persons with BD who misuse alcohol and other drugs.

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REFERENCES

American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders*, 5th edn. Washington, DC: American Psychiatric Association.

Arndt, S., Clayton, R. & Schultz, S. K. (2011). Trends in substance abuse treatment 1998–2008: Increasing older adult first-time admissions for illicit drugs. *American Journal of Geriatric Psychiatry*, *19* (8), 704–711.

Bartels, S. J., Blow, F. C., Van Citters, A. D. & Brockmann, L. M. (2006). The effects of at-risk drinking on the treatment of late life major depression: A pilot study to establish effects. *Journal of Dual Diagnosis*, *2* (3), 47–56.

Boeije, H. (2002). A purposeful approach to the constant comparative method in the analysis of qualitative interviews. *Quality & Quantity*, *36*, 391–409.

Boeri, M. W., Sterk, C. E. & Elifson, K. W. (2006). Boomer users: Career phases, control, and social learning theory. *Sociological Inquiry*, *76* (2), 264–291.

Boyatzis, R. E. (1998). *Transforming Qualitative Information: Thematic Analysis and Code Development*. Thousand Oaks, CA: Sage.

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*, 77–101.

Canham, S. L., Mahmood, A., Stalman, M. N., King, D. B. & O'Rourke, N. (2017). Personal theories of substance use by middle-aged and older adults with bipolar disorder. *Aging & Mental Health*, 1–6.

Carter, A., Mathews, R., Bell, S., Lucke, J. & Hall, W. (2014). Control and responsibility in addicted individuals: What do addiction neuroscientists and clinicians think? *Neuroethics*, *7* (2), 205–214.

Cassidy, F., Ahearn, P. & Carroll, B. (2001). Substance abuse in bipolar disorder. *Bipolar Disorders*, *3*, 181–188.

Crowe, M., Inder, M., Carlyle, D. *et al.* (2012). Feeling out of control: A qualitative analysis of the impact of bipolar disorder. *Journal of Psychiatric and Mental Health Nursing*, *19* (4), 294–302.

Depp, C. A. & Jeste, D. V. (2004). Bipolar disorder in older adults: A critical review. *Bipolar Disorder*, *6* (5), 343–367.

Depp, C. A. & Lebowitz, B. D. (2007). Enhancing medication adherence in older adults with bipolar disorder. *Innovations in Clinical Neuroscience*, *4* (6), 22–32.

Dols, A., Rhebergen, D., Beekman, A., Kupka, R., Sajatovic, M. & Stek, M. L. (2014). Psychiatric and medical comorbidities: Results from a bipolar elderly cohort study. *American Journal of Geriatric Psychiatry*, *22* (11), 1066–1074.

Fanton, M. C., Azzollini, S. C., Ayi, J. A., Sio, A. G. & Mora, G. E. (2013). Perception of control over cocaine use and stages of change. *Psychology of Addictive Behaviors*, *27* (3), 841–847.

Goldberg, J. F., Garno, J. L., Leon, L. C., Kocsis, J. H. & Portera, L. (1999). A history of substance abuse complicates remission from acute mania in bipolar disorder. *Journal of Clinical Psychiatry*, *60*, 733–740.

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Goodwin, F. K. & Jamison, K. R. (2007). *Manic-Depressive Illness: Bipolar Disorders and Recurrent Depression*, 2nd edn. Oxford: Oxford University Press.

Hall, N. C., Chipperfield, J. G., Heckhausen, J. & Perry, R. P. (2010). Control striving in older adults with serious health problems: A 9-year longitudinal study of survival, health, and well-being. *Psychology and Aging*, *25* (2), 432–445.

Han, B., Gfroerer, J. C., Colliver, J. D. & Penne, M. A. (2009). Substance use disorder among older adults in the United States in 2020. *Addiction*, *104* (1), 88–96.

Han, B. H., Sherman, S., Mauro, P. M., Martins, S. S., Rotenberg, J. & Palamar, J. J. (2016). Demographic trends among older cannabis users in the United States, 2006–13. *Addiction*, *112*, 516–525.

Hoblyn, J. C., Balt, S. L., Woodard, S. A. & Brooks, J. O. (2009). Substance use disorders as risk factors for psychiatric hospitalization in bipolar disorder. *Psychiatric Services*, *60*, 50–55.

Kennedy, G. J. (2008). Bipolar disorder in late life: Mania. *Primary Psychiatry*, *15* (1), 28–33.

King, D. B. & O'Rourke, N. (2016). Bipolar disorder in older adults. In: S. A. Beaudreau, N. Pachana & O. Riberio (Eds). *Encyclopedia of Gerontology*. New York, NY: Springer.

Kvale, S. (2008). *Doing Interviews*. Thousand Oaks, CA: Sage Publications.

Lim, L., Nathan, P., O'Brien-Malone, A. & Williams, S. (2004). A qualitative approach to identifying psychosocial issues faced by bipolar patients. *The Journal of Nervous and Mental Disease*, *192* (12), 810–817.

Marlatt, G. A., Blume, A. W. & Parks, G. A. (2001). Integrating harm reduction therapy and traditional substance abuse treatment. *Journal of Psychoactive Drugs*, *33* (1), 13–21.

Michalak, E. E., Suto, M. J., Barnes, S. J. *et al.* (2016). Effective self-management strategies for bipolar disorder: A community-engaged Delphi Consensus Consultation Study. *Journal of Affective Disorders*, *206*, 77–86.

Montes, J. M., Maurino, J., de Dios, C. & Medina, E. (2013). Suboptimal treatment adherence in bipolar disorder: Impact on clinical outcomes and functioning. *Patient Preference and Adherence*, *7*, 89–94.

Murray, C. J. & Lopez, A. D. (1997). Global mortality, disability, and the contribution of risk factors: Global Burden of Disease Study. *Lancet*, *349*, 1436–1442.

Murray, G., Suto, M., Hole, R., Hale, S., Amari, E. & Michalak, E. E. (2011). Self-management strategies used by "high functioning" individuals with bipolar disorder: From research to clinical practice. *Clinical Psychology and Psychotherapy*, *18* (18), 95–109.

Nivoli, A. M. A., Murru, A., Pacchiarotti, I. *et al.* (2014). Bipolar disorder in the elderly: A cohort study comparing older and younger patients. *Acta Psychiatrica Scandinavica*, *130*, 364–373.

O'Rourke, N., Sixsmith, A., King, D. B., Yaghoubi-Shahir, H. & Canham, S. L. (2016). Development and validation of the BD S_x: A brief measure of mood and symptom variability for use with adults with bipolar disorder. *International Journal of Bipolar Disorders*, *4* (1), 1–8.

Patton, M. Q. (2002). *Qualitative Research and Evaluation Methods*, 3rd edn. Thousand Oaks, CA: Sage.

Rotter, J. B. & Mulry, R. C. (1965). Internal versus external control of reinforcement and decision time. *Journal of Personality and Social Psychology*, *2*, 598–604.

Sajatovic, M., Blow, F. C., Ignacio, R. V. & Kales, H. C. (2004). Age-related modifiers of clinical presentation and health service use among veterans with bipolar disorder. *Psychiatric Services*, *55* (9), 1014–1021.

Sajatovic, M., Blow, F. & Ignacio, R. (2006a). Psychiatric comorbidity in older adults with bipolar disorder. *International Journal of Geriatric Psychiatry*, *21*, 582–587.

Sajatovic, M., Bauer, M. S., Kilbourne, A. M. *et al.* (2006b). Self-reported medication treatment adherence among veterans with bipolar disorder. *Psychiatric Services*, *57*, 56–62.

Sajatovic, M., Strejilevich, S. A., Gildengers, A. G. *et al.* (2015). A report on older-age bipolar disorder from the International Society for Bipolar Disorders Task Force. *Bipolar Disorders*, *17*, 689–704.

Schaffer, A., Cairney, J., Cheung, A., Veldhuizen, S. & Levitt, A. (2006). Community survey of bipolar disorder in Canada: Lifetime prevalence and illness characteristics. *Canadian Journal of Psychiatry*, *51*, 9–16.

Van den Heuvel, S. C. G. H., Goossens, P. J. J., Terlouw, C., Van Achterberg, T. & Schoonhoven, L. (2015). Identifying and describing patients' learning experiences towards self-management of bipolar disorders: A phenomenological study. *Journal of Psychiatric and Mental Health Nursing*, *22*, 801–810.

Westman, J., Hällgren, J., Wahlbeck, K., Erlinge, D., Alfredsson, L. & Ösby, U. (2013). Cardiovascular mortality in bipolar disorder: A population-based cohort study in Sweden. *British Medical Journal Open*, *2013* (3), e002373.

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