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Comparing Barriers to Mental Health Treatment and Substance Use Disorder Treatment among Individuals with Comorbid Major Depression and Substance Use Disorders

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Abstract

Barriers to both mental health and substance use disorder treatments have rarely been examined among individuals with comorbid mental health and substance use disorders. In a sample of 393 adults with 12-month major depressive episodes and substance use disorders, we compared perceived barriers to these two types of treatments. Data were drawn from the 2005-2011 US National Surveys on Drug Use and Health. Overall, the same individuals experienced different barriers to mental health treatment vs. substance use disorder treatment. Concerns about negative views of the community, effects on job, and inconvenience of services were more commonly reported as reasons for not receiving substance use disorder treatment. Not affording the cost of care was the most common barrier to both types of treatments, but more commonly reported as a barrier to mental health treatment. Improved financial access through the Affordable Care Act and parity legislation and integration of mental health and substance use disorder services may help to reduce treatment barriers among individuals with comorbid mental health and substance disorders.

Keywords

Comorbidity; service use; barriers to care; substance disorder services; mental health services

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1. Introduction

Mental disorders are commonly comorbid with substance use disorders in both clinical and community settings (Center for Substance Abuse Treatment, 2005; Crum, Brown, Liang, & Eaton, 2001; Crum, Storr, Ialongo, & Anthony, 2008; Grant et al., 2004; Hall, Popkin, Stickney, & Gardner, 1978; Kessler, 2004; Kessler et al., 1997; Khantzian, 1980). This comorbidity is often associated with a greater severity of symptoms and a more profound impairment in role functioning (Burns, Teesson, & O'Neill, 2005; Clark, Samnaliev, & McGovern, 2009; Hasin et al., 2002; Landheim, Bakken, & Vaglum, 2006; Lynskey, 1998).

There is growing evidence that individuals with comorbid disorders need both mental health (MH) and substance use disorder (SUD) treatments, preferably in an integrated context (Drake, Mueser, & Brunette, 2007; Grella & Stein, 2006; Herman et al., 2000; McGovern, Xie, Segal, Siembab, & Drake, 2006; Primm, Tzolova-Iontchev, & Taylor, 2000). However, many individuals with comorbid disorders do not receive any treatment (Urbanoski, Cairney, Bassani, & Rush, 2008; Urbanoski, Rush, Wild, Bassani, & Castel, 2007). For example, in a Canadian study, almost half of the participants with 12-month mood or anxiety disorders and comorbid substance dependence had not used any formal or informal treatments in the past year (Urbanoski, et al., 2007). Relatively little is known about the barriers to treatments among individuals with SUD and MH comorbidity. Furthermore, virtually no studies have compared barriers to the MH and SUD services among these individuals. Differences in funding arrangements for the MH and SUD services suggest that financial barriers might have different impacts on the use of the two types of services. Also, attitudinal barriers may play different roles in the use of MH vs. SUD services. A better understanding of the perceived barriers to MH and SUD services can help in the design and implementation of accessible and integrated services that are capable of meeting the needs of individuals with comorbid disorders (Donald, Dower, & Kavanagh, 2005; Drake, Mueser, Brunette, & McHugo, 2004; Flynn & Brown, 2008; Grella, 2003; Mojtabai, 2004).

This study used data from seven years of the cross-sectional National Survey on Drug Use and Health (NSDUH 2005 to 2011). Our goal was to examine barriers to MH and SUD treatments in a large cohort of community-dwelling adults with 12-month major depressive episodes (MDE) and alcohol or illicit drug abuse or dependence who had perceived unmet need for both types of treatments. Specifically, the study aims were to assess whether individuals with comorbid MDE and substance disorders who perceive an unmet need for both MH and SUD treatment face the same or different types of barriers to these two types of treatment, and whether individuals who face one type of barrier to MH treatment also face the same type of barriers to SUD treatment, and vice versa. The study focused on a group of individuals with comorbid disorders who either had perceived a need for treatment and not received any treatment in the past year or had received some treatment but had perceived an unmet need for additional treatment. As a result of perceiving such unmet need, participant reported on the barriers to both types of treatment. Limiting the sample to these individuals helps to reduce the effect of differences in characteristics of participants when comparing different groups who have perceived a need for one or the other type of treatment. Furthermore, MDE are common in general population and clinical settings and are often associated with significant impairment in role functioning and other mental disorders.

2. Materials and Methods

2.1. Sample

The NSDUH sample has been described in detail elsewhere (Substance Abuse and Mental Health Services Administration, Substance Abuse and Mental Health Services

Administration 2006,2007,2008,2009,2010,2011). Briefly, the NSDUH is a representative cross-sectional annual survey of US adults in the 50 states and the District of Columbia sponsored by Substance Abuse and Mental Health Services Administration (SAMHSA). The target population was comprised of residents of households, non-institutional group quarters, and civilians living on military bases who were 12 years old or older. All interviews were conducted in person, using computer-assisted interviewing methods (response rate range=73.9% to 76.0%, Median=74.7%). The sample for the study was drawn from the total sample of 266,256 adults in the seven survey years. The sample was comprised of 393 NSDUH participants who met the criteria for both 12-month MDE and SUD and also reported an unmet need for both MH and SUD treatments (for derivation of the sample see Figure 1).

2.2. Assessments

Major depressive episodes in the past 12 months were assessed using a structured interview based on *DSM-IV* criteria (American Psychiatric Association., 2000). Questions were adapted from the depression section of the National Comorbidity Survey Replication (Kessler et al., 2003) and administered by using computer-assisted interviewing methods. In addition, the total number of lifetime depressive episodes and the age of onset of the first episode were assessed.

Substance use disorders in the past 12 months were similarly ascertained using structured interview instruments which assessed DSM-IV symptom criteria for abuse and dependence. For this study, SUD included abuse of or dependence on alcohol, heroin, cocaine, cannabis, pain-killers, hallucinogens, inhalants, sedatives and tranquilizers and stimulants.

Perceived unmet need for treatment was assessed separately for MH and SUD treatment. Perceived unmet need for MH treatment was assessed by the following question: "During the past 12 months, was there any time when you needed mental health treatment or counseling for yourself but didn't get it?" The question was asked from all participants regardless of their MH treatment history. Perceived unmet need for SUD treatment was assessed by two questions. Participants who did not report any SUD treatment in the past 12 months were asked: "During the past 12 months, did you need treatment or counseling for your alcohol or drug use?" Participants who reported having used any SUD treatments in the past 12 months were asked: "During the past 12 months, did you need additional treatment or counseling for your alcohol or drug use?" Positive responses to these questions were rated as perceived unmet need for MH or SUD treatment.

Perceived barriers to SUD or MH treatments were ascertained for participants who reported an unmet need for both SUD and MH services. Participants were presented with two separate series of statements about why they did not receive treatment. One series of statements assessed reasons for not receiving SUD treatment and another, assessed reasons for not receiving MH treatment. The reasons for not receiving SUD and MH treatment were, for the most part, identically worded or quite similar and included financial (e.g., inability to afford the cost), attitudinal (e.g., concerns about opinions of neighbors) and other structural reasons.

2.3. Statistical analyses

Analyses were conducted in two stages. First, we compared perceived barriers to SUD and MH treatments among the 393 participants with comorbid MDE and SUD. As these analyses were conducted within the same sample of participants, symmetry homogeneity test (Spielman, McGinnis, & Ewens, 1993) was conducted to compare the same or very similar barriers to the two types of treatment. Symmetry homogeneity test which is similar

to the McNemar test (Fleiss, 1981), assessed whether individuals were more or less likely to report the same type of barrier to MH vs. SUD treatment. In addition Phi statistics were computed to assess correlation among these barriers within individuals (Fleiss, 1981). Second, to further assess as to what extent a perceived barrier to one kind of treatment corresponded with the same perceived barrier to the other kind of treatment, percent agreement and Cohen's kappa statistic (Fleiss, 1981) was computed. Kappa adjusts for chance agreement among two ratings. While kappa has been most commonly used to assess agreement between raters (inter-rater reliability), it can also be used to assess similarity or concordance between ratings within the same raters (Fleiss, 1981; Grootendorst, Feeny, & Furlong, 1997; To, Estrabillo, Wang, & Cicutto, 2008). Kappa values greater than .75 may be taken to represent excellent agreement, values in the .40 to .75 range, fair to good agreement, and values less than .40, poor agreement (Fleiss, 1981).

As lack of health insurance is generally considered a major barrier to health care, further analyses were conducted to assess differences in barriers across groups of individuals with and without any health insurance coverage. The prevalence of different barriers was statistically compared across these two groups using contingency tables and chi-squared tests.

Analyses were conducted using the Stata 12 software (StataCorp, 2011). As the analyses involved comparing barriers to treatment within the same individuals, weights and other NSDUH survey design elements were not used in these analyses. A threshold of $p < 0.05$ was used to judge the statistical significance of all tests.

3. Results

The majority of the 393 participants included in the sample for the study were female ($n=220$, 56.0%), in the 18-25 years age range ($n=227$, 57.8%), non-Hispanic white ($n=262$, 66.7%), currently employed ($n=184$, 65.0%) and never married ($n=193$, 68.2%). A total of 174 (44.3%) participants reported having at least some college education and 93 (23.7%) reported having an annual income of \$50,000 or more. Another 160 (40.7%) reported an income of less than \$20,000.

A majority of participants met the criteria for an alcohol use disorder ($n=292$, 74.3%). Other common substance use disorders included abuse of or dependence on cannabis ($n=117$, 29.8%), prescription pain-killers ($n=104$, 26.5%), cocaine ($n=81$, 20.6%), and heroin ($n=19$, 4.8%). The large majority met the criteria for a substance dependence ($n=371$, 94.4%). Of the 345 participants who reported on the number of lifetime major depressive episodes, 331 (95.9%) reported more than one lifetime episode. A total of 110 (38.9%) participants were covered by private health insurance, 73 (18.6%) by Medicaid, and 24 (6.1%) Medicare; 143 (36.8%) had no health care coverage. Health insurance status for 4 participants was missing.

The most common reason for not receiving MH treatment was not affording the cost of such treatment, reported by 49.4% of participants who reported unmet need for MH treatment (Table 1), followed by a fear of being committed to a psychiatric hospital or being forced to take medications (20.1%). Lack of knowledge about where to go to receive treatment (18.8%) and a feeling that the participant should be able to handle the problem on his or her own (15.8%) were the third and fourth most common reasons reported.

The most common reason for not receiving SUD treatment was also not affording the cost of such treatment, reported by 42.8% of individuals who reported an unmet need for SUD treatment (Table 1), followed by not wanting to stop the use of drugs or alcohol (38.9%). Fears about stigmatizing attitudes of neighbors and community (22.9%) and lack of

knowledge about where to go to receive treatment (18.3%) were the third and fourth most common reasons for not receiving SUD treatment.

Symmetry homogeneity tests for comparing barriers to MH and SUD treatments were statistically significant for not affording the cost of care, lack of insurance coverage or inadequate coverage, concerns about negative opinions of neighbors or community, effect on job, and inconvenience due to lack of transportation or operation hours (Table 1). Statistically significant homogeneity tests indicate that individuals were more or less likely to experience barriers of the same kind to the two different types of services. Thus, for example, unaffordability concerns were a more common barrier to receiving needed MH treatment than SUD treatment. Nevertheless, there was a strong association between cost barriers to MH and SUD treatments as reflected by the relatively large phi coefficient (0.75). Concerns about negative views of neighbors and the community, effect on job and inconvenience of services were more commonly reported as barriers to receiving needed SUD than MH treatments (Table 1).

Kappa statistics for positive responses to barriers of the same kind for SUD and MH treatments were generally stronger than kappas across barriers of different kind (Table 2), indicating that individuals who reported one kind of barrier to SUD treatments were also more likely to report the same kind of barrier to the MH treatments and vice versa. However, these values were mostly in the poor to fair range. The highest kappa value for barriers of the same kind was for not affording the cost of the two types of treatments (kappa=0.74, agreement=87.3%). Of the 168 individuals who reported cost as a barrier to SUD treatment and 194 who reported cost as a barrier to MH treatment, 156 had reported cost as a barrier to both types of treatments. The smallest kappa value for barriers of the same kind was for not finding treatments helpful (kappa=0.17, 88.3% agreement). Of the 28 individuals who reported this as a barrier to SUD treatment and the 32 who reported it as a barrier to MH treatment, only 7 reported it as a barrier to both types of treatments. The large percentage of agreement for these ratings was due to the low prevalence of reporting this as a barrier.

In further analyses comparing barriers to MH and SUD treatments according to health insurance coverage, those without any coverage were significantly more likely than those with any coverage to report cost barriers to both MH treatment (78.3% vs. 32.5%, Chi-squared=75.89, df=1, $P<.001$) and SUD treatment (69.2% vs. 26.3%, Chi-squared=69.10, df=1, $P<.001$) and to report lack of transportation, distance or inconvenience as a barrier to MH treatment (9.1% vs. 3.3%, Chi-squared=6.04, df=1, $P=.014$). However, individuals without health insurance coverage were less likely than those with coverage to report lack of insurance as a barrier to SUD treatment (2.7% vs. 9.7%, Chi-squared=6.75, df=1, $P<.009$). There were no significant differences with regard to other barriers among individuals with and without health insurance coverage (data not shown).

4. Discussion

This study found some similarities as well as differences between the barriers to SUD and MH treatments among individuals with comorbid MDE and SUD who had perceived a need for treatment for both conditions. Concerns about cost of care were the most common single barrier to both MH and SUD care in this group of individuals, although a more prominent barrier to MH than to SUD treatment and, not surprisingly, more common among individuals without health insurance. This barrier was also associated with the largest kappa value when comparing barriers to MH and SUD treatments, indicating that a large proportion of individuals who reported not affording the cost as a reason for not using MH treatments also reported this reason for not using SUD treatment and vice versa.

Past research on barriers to MH and SUD treatments has produced somewhat mixed findings, with different studies identifying somewhat different barriers. For example, attitudes towards the MH or SUD problems were more commonly reported in some studies (Mojtabai et al., 2011; Sareen et al., 2007; Saunders, Zygowicz, & D'Angelo, 2006; Urbanoski, et al., 2008), while financial barriers (Mojtabai, 2009), and accessibility of services (Jackson & Shannon, 2012) were the most commonly reported barriers in other studies. The differences are likely due to differences in assessment method and populations, making comparison across studies difficult if not impossible. Some of the past studies were based on specific populations and did not include representative population samples. Furthermore, with few exceptions (Urbanoski, et al., 2008) studies have rarely specifically examined barriers among individuals with comorbid disorders. The current study attempted to address the gap in past research by examining similar sets of barriers to both types of services among the same group of individuals with comorbid disorders drawn from a representative population sample.

A major finding of the study was the predominance of concerns about cost of care as a barrier to treatment seeking. Concerns about cost of care have been among the major barriers to MH and SUD treatment seeking in the US over the years and continue to remain so (Mojtabai, 2005). Lack of health insurance coverage in a large proportion of the US population and the disparity in coverage of MH and SUD compared to other health conditions have impacted access to MH and SUD services for many years. A number of state-initiated parity legislations and Medicaid expansion programs attempted to address these deficiencies in coverage (Jordahl, 1997; Long & Zuckerman, 2004). The 2008 Mental Health Parity and Addiction Equity Act (MHPAE) and the 2010 Affordable Care Act (ACA) both attempted to address these problems in access to services at a national level. If successful in meeting their goals, these legislative initiatives would likely reduce the prevalence of cost barriers to both MH and SUD treatments.

Concerns about views of other people were more significant barriers to SUD than MH treatments, implying that the use of SUD services may be more stigmatizing. Indeed, negative views regarding SUD services have traditionally been among the major reasons for not using these services (Appel, Ellison, Jansky, & Oldak, 2004; Grant, 1997; Jackson & Shannon, 2012; Keyes et al., 2010; Wu, Blazer, Li, & Woody, 2011; Young & Grella, 1998). Integration of SUD services in MH or physical health services may help to overcome this barrier. Furthermore, integration of services can help to make SUD services more easily accessible to individuals with comorbid disorders because inconvenience of services was also a more significant barrier to SUD services than MH services. Medical homes envisioned in the ACA provide one model for such integration (Buck, 2011; Croft & Parish, 2012). Adoption of SUD treatments, such as buprenorphine, in general medical settings may also improve access to these treatments in future integrated services.

The findings of this study should be viewed in the context of some limitations. First, the data were cross-sectional and based on self-reports of reasons for not using services. Second, only one mental health condition was assessed in NSDUH (MDE) and the results may not generalize to individuals with other mental health conditions that are comorbid with SUD. Third, this study was limited to individuals who perceived a need for care. The large majority of individuals with comorbid disorders do not perceive a need for care (Edlund, Unutzer, & Curran, 2006; Mojtabai, Olfson, & Mechanic, 2002). Indeed, lack of perceived need is probably the major barrier to either kind of treatment. Fourth, this study only examined barriers to treatment from the perspective of clients or potential clients of services. It is possible to view barriers from other perspectives, including a national or state policy perspective (Croft & Parish, 2012) or service providers perspective (Lundgren, Chassler, Amodeo, D'Ippolito, & Sullivan, 2012; McGovern, et al., 2006). The nature of barriers to

treatment would be different from each one of these perspectives. For example, McGovern and colleagues identified lack of psychiatrists and resources as a common barrier to provision of services to individuals with comorbid disorders from the providers' perspective (McGovern, et al., 2006). Addressing the treatment needs of individuals with comorbid disorders likely requires attention to barriers from various perspectives.

Despite these limitations, this study provides a first glimpse at the barriers to MH and SUD treatments from the perspective of service users or potential services users with comorbid disorders. Improved understanding of the barriers to care in this group of individuals is essential for the design of accessible services. For providers working with this population, it is important to recognize that accessing one type of service does not mean that the client would have access to other kinds of services as well. For example, transportation or distance may limit access to needed SUD services among individuals with comorbid disorders receiving MH services, or cost of care may be a more prominent barrier to MH services among SUD service users with comorbid disorders. With the unfolding of the parity legislation, the ACA and attempts at integration of SUD and MH services at state and national levels, it will be important to continue monitoring access to these services among individuals with comorbid disorders.

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Figure 1.

Derivation of the sample of 393 adult participants of the National Survey on Drug Use and Health (NSDUH 2005-2011) with comorbid 12-month major depressive episodes (MDE) and substance use disorder (SUD) who had perceived an unmet need for both mental health (MH) and SUD treatments.

Footnotes:

^a The sample includes 12 participants with missing data on treatment.

Table 1

Reasons for not receiving mental health (MH) or substance use disorder (SUD) treatments in 393 adult participants of National Survey on Drug Use and Health (NSDUH 2005-2011) with comorbid 12-month major depressive episodes and SUD who had perceived an unmet need for both MH and SUD treatments.

Reasons for not receiving needed MH treatment		Reasons for not receiving needed SUD treatment		Symmetry homogeneity tests and phi correlation coefficients			
Reasons	N	%	Reasons	N	%	$\chi^2_{df=1}$	Phi
You thought you could handle the problem without treatment (HANDLE).	62	15.8	You thought you could handle the problem without treatment (HANDLE).	60	15.3	0.05	0.20
You couldn't afford the cost (COST).	194	49.4	You had no health care coverage, and you couldn't afford the cost (COST).	168	42.8	13.52***	0.75
Your health insurance does not cover any mental health treatment or counseling. OR Your health insurance does not pay enough for mental health treatment or counseling (INSURANCE).	42	10.7	You did have health care coverage, but it didn't cover treatment for [the substance of abuse], or didn't cover the full cost (INSURANCE).	28	7.1	4.26*	0.29
You were concerned that getting mental health treatment or counseling might cause your neighbors or community to have a negative opinion of you (NEIGHBORS).	59	15.0	You were concerned that getting treatment or counseling might cause your neighbors or community to have a negative opinion of you (NEIGHBORS).	90	22.9	13.16***	0.42
You were concerned that getting mental health treatment or counseling might have a negative effect on your job (JOB).	44	11.2	You were concerned that getting treatment or counseling might have a negative effect on your job (JOB).	59	15.1	4.59*	0.46
You didn't want others to find out that you needed treatment (OTHERS).	32	8.1	You didn't want others to find out that you needed treatment (OTHERS).	41	10.4	1.72	0.29
You did not know where to go to get services (KNOWLEDGE).	74	18.8	You did not know where to go to get treatment (KNOWLEDGE).	72	18.3	0.07	0.53
You didn't have time (because of job, childcare, or other commitments) (TIME).	37	9.4	You didn't have time (because of job, childcare, or other commitments) (TIME).	35	8.9	0.09	0.30
You had no transportation, or treatment was too far away, or the hours were not convenient (INCONVENIENT).	21	5.3	You had no transportation to a program, or the programs were too far away, or the hours were not convenient (INCONVENIENT).	47	12.0	16.1***	0.37
You didn't think treatment would help (NOT HELPFUL).	32	8.1	You didn't think treatment would help (NOT HELPFUL).	28	7.1	0.35	0.17
You were concerned that the information you gave the counselor might not be kept confidential.	55	14.0					
You were concerned that you might be committed to a psychiatric hospital or might have to take medicine.	79	20.1					
			You didn't find a program that offered the type of	31	7.9		

Reasons for not receiving needed MH treatment			Reasons for not receiving needed SUD treatment			Symmetry homogeneity tests and phi correlation coefficients	
Reasons	N	%	Reasons	N	%	$\chi^2_{df=1}$	Phi
			treatment or counseling you wanted.				
			You were not ready to stop using [the substance of abuse].	153	38.9		
			There were no openings in the programs.	12	3.1		

* $p < 0.05$
 ** $p < 0.01$
 *** $p < 0.001$

Table 2

Correspondence between reasons for not receiving needed mental health (MH) or substance use disorder (SUD) treatments as measured by Cohen's kappa statistics and percent agreement in 393 adult participants of National Survey on Drug Use and Health (NSDUH 2005-2011) with comorbid 12-month major depressive episodes and SUD who had perceived an unmet need for both MH and SUD treatments. Questions about each reason are presented in Table 1.

MH services BARRIERS	HANDLE	COST	INSURANCE	NEIGHBORS	JOB	OTHERS	KNOWLEDGE	TIME	INCONVENIENT	NOT HELPFUL
SUD SERVICES BARRIERS	Kappa (% agreement)									
HANDLE	0.20 *** (79.1%)	-0.08 (46.6%)	-0.01 (77.1%)	0.12 ** (77.4%)	0.03 (77.6%)	0.20 *** (83.2%)	-0.01 (71.5%)	0.08 (79.9%)	0.13 ** (83.5%)	0.17 *** (82.7%)
COST	-0.13 (49.1%)	0.75 *** (87.3%)	0.00 (55.7%)	-0.06 (52.4%)	-0.01 (55.2%)	-0.02 (55.2%)	0.00 (54.7%)	-0.04 (53.9%)	0.04 (58.0%)	-0.07 (52.7%)
INSURANCE	0.01 (79.6%)	0.02 (51.7%)	0.28 *** (88.3%)	0.15 (83.0%)	0.15 ** (85.8%)	0.15 ** (86.9%)	0.15 ** (87.3%)	0.10 * (85.0%)	0.01 (89.1%)	0.03 (86.3%)
NEIGHBORS	0.01 (69.0%)	-0.08 (46.1%)	0.04 (72.5%)	0.40 *** (81.4%)	0.23 *** (77.6%)	0.12 ** (76.1%)	0.19 *** (73.0%)	0.14 ** (75.8%)	0.02 (74.8%)	0.03 (73.5%)
JOB	-0.03 (73.3%)	0.00 (50.4%)	0.17 ** (81.4%)	0.36 *** (83.7%)	0.45 *** (87.5%)	0.08 * (80.9%)	0.09 * (74.3%)	0.15 *** (81.7%)	0.00 (81.2%)	-0.04 (78.4%)
OTHERS	0.06 (78.4%)	-0.07 (46.8%)	-0.04 (80.4%)	0.27 *** (83.7%)	0.09 * (82.4%)	0.29 *** (88.0%)	0.05 (75.8%)	0.03 (82.7%)	0.10 * (86.8%)	0.05 (84.0%)
KNOWLEDGE	0.05 (73.0%)	0.02 (51.2%)	-0.03 (74.1%)	0.11 * (75.3%)	0.04 (75.6%)	0.09 * (78.6%)	0.53 *** (85.8%)	0.07 (77.4%)	0.05 (78.8%)	0.02 (77.1%)
TIME	0.10 * (80.4%)	-0.03 (48.9%)	0.07 (83.5%)	0.14 ** (81.7%)	0.17 *** (85.0%)	0.17 *** (87.0%)	0.09 (77.9%)	0.30 *** (88.3%)	0.12 ** (88.3%)	0.10 * (86.0%)
INCONVENIENT	0.01 (76.3%)	0.04 (52.4%)	0.08 (81.4%)	0.06 (78.1%)	0.09 * (81.4%)	0.03 (82.4%)	0.08 (75.8%)	0.04 (81.7%)	0.33 *** (89.3%)	-0.05 (80.9%)
NOT HELPFUL	0.14 ** (82.2%)	-0.05 (48.1%)	0.03 (84.2%)	0.20 *** (84.0%)	0.12 (85.2%)	0.10 * (87.3%)	0.06 (78.1%)	0.11 * (86.5%)	0.15 ** (90.1%)	0.17 *** (88.3%)

* $p < 0.05$,

** $p < 0.01$,

*** $p < 0.001$