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An Analysis of the Relationship between Humor Styles and Depression

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Abstract

The present study examined the relationship between humor styles and depression using two methods of examination: (1) the mean humor style differences between individuals who reported that they had been diagnosed with depression versus those who did not report being depressed; and (2) a short scale assessing depressed affect. Participants were 878 adult Australians. With respect to mean differences, depressed individuals were found to use self-defeating humor more, and self-enhancing humor less than non-depressed adults. When the depressed affect scale score was analyzed, negative correlations were found between depressed affect and both positive styles of humor, affiliative and self-enhancing. Additionally, a positive correlation was found between depressed affect and both aggressive and self-defeating humor. These results hope to shed light on the uses of humor in depressed individuals, and to further research to understand how humor can be used to improve or hurt depressive outcomes.

Key words: humor styles; depression; adult

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The Relationship between Humor Styles and Depression

Introduction

When the concepts of both depression and humor are presented, several images may come to mind. Maybe a particular dark comedic reference, or possibly the image of a well-known comedian who struggled publicly with depression or other mental health disorders. Depression is known as one of the most common mental health disorders by today's standard (Bromet et al., 2011). And as the title of this research suggests, it has an interesting relationship with humor. In fact, these two seemingly opposing constructs are entangled much more deeply. Through this research, it is understood that humor presents itself inside depression in both beneficial, as well as destructive ways.

Humor also may be able to help further the understanding of depression in the mind. First and foremost, the most recent diagnostic definition of depressive disorders from the Diagnostic and Statistical Manual of Mental Disorders- 5th Edition (DSM-5; American Psychiatric Association, 2013), defines "Depressive Disorders" as the feelings of sadness, emptiness or irritableness in addition to other cognitive or physiological symptoms that interfere with one's ability to function. Depression can interfere, but may not always impede, both personal and social relationships, and is associated with an increased sensitivity to criticism, interpersonal problems, and social isolation (Natoli et al., 2016; Barrett & Barber, 2007; Dinger et al., 2015). Because the nature of humor is both interpersonal and intrapersonal, it influences both social interactions with others, as well as intrapersonal thoughts and feelings. One of the most recent theories of humor, the Humor Styles Theory (Martin, Puhlik-Doris, Larsen, Gray & Weir, 2003) explores this more deeply, showing how decades of humor research make up several constructs of humor that are quite different from one another. These four styles of humor serve different

purposes, and can be either positive or negative. These humor styles play an important role in how an individual may feel about their self and their relationships with others. Humor is used in an attempt to connect with others to fulfill one's own need for connection. For depressed persons, humor may therefore be used in ways that are not at all conducive to the maintenance of their mental health. Therefore, depression can be seen as a lens in which collective and individual interactions can be observed through. Differences in humor style could therefore be a lens to understand depression even further. The present study furthers the understanding of depression and depressed affect by examining the relationship with humor styles.

The History of Humor and Mental Health

Positive psychology research has demonstrated that humor has powerful effects on both physical and mental health (Cann, Stilwell, & Taku, 2010; Chen & Martin, 2007). For example, humor has been shown to benefit those suffering from several forms of cancer, mental health disorders, dementia, and bring comfort to the dying (Richman, 2006; Mak, Sörensen & Pruchno, 2018; Rose, Spencer & Rausch, 2013). Humor was also shown to influence physical and mental health with the work of Norman Cousins, whose 1979 *Anatomy of an illness as perceived by the patient: Reflections on healing and regeneration,* delved into humor as a form of medicine for physical disease. Cousins, a renowned professor and author, treated his terminal degenerative tissue disease with forms of humor replacing painkillers. It was this work, as well as the work of other profound researchers that solidified the quest to understand humor and its relationship to the body and mind.

Several decades of humor research later, there have been conflicting theories regarding defining and constructing the building blocks of humor. Anthropologically speaking, humor

began as a medical term, used by the Greeks to describe the four bodily fluids that dictated good or bad behaviours (black or yellow bile, blood and phlegm) (Raskin, 2008). Freud's theory of positive emotion, specifically humor, was especially profound, proposing that jokes, humor, and wit are all representations of the unconscious mind (Newirth, 2006). Humor is now understood to not only be a social interaction, but an important intrapersonal interaction as well. People use humor to connect with others, and to connect with and validate themselves. It is an essential component of interaction, and can be traced back to human, and even primate interactions (Polimeni & Reiss, 2006). In keeping with this perspective of humor, McGhee (1979) hypothesized that one's trait-playfulness vs. seriousness, is what dictated what he termed a "sense of humor". More specifically, humor/playfulness was fundamental to human/child development, as children were viewed as inherently playful, until socialization altered this level of seriousness vs. playfulness. McGhee's theory includes concepts such as finding humor in everyday life, using humor under stress, and the enjoyment of humor. Ruch and Carrell (1998) later added to this research, showing not two, but three distinct constructs for humor, replacing a "sense of humor" with trait-cheerfulness, along with seriousness and bad mood. These three traits were seen to construct a humorous temperament.

Therefore, humor has been defined as a coping or defense mechanism, and as an innate trait or temperament (Raskin, 2008). However, it is true that humor contains all of these elements in some way. This underpins the Humor Styles Theory. Martin et al. (2003) proposed the Humor Styles Theory, which centered on the belief that humor has both positive and negative functions. Humor is seen as a fairly stable construct throughout adult life, wherein individuals have a tendency to use humor in a consistent way. Specifically, the four styles of humor in Martin et al.'s (2003) theory include two positive styles (affiliative and self-enhancing) and two negative

humor styles (aggressive and self-defeating), and was constructed by examining and combining several theories of humor to make a valid and reliable 2x2 model.

Positive styles of humor, are derived from earlier theories of coping humor and joke-telling, and have been shown to benefit mental health, specifically in feelings of happiness, good overall health, and social self-esteem (Kuiper & McHale, 2009; Yue et al., 2014). Affiliative humor includes practical joking, and playful humor. It is used to amuse others, to relieve tension, and to form positive interpersonal relationships. It is perceived by others as fairly non-hostile and attractive. Martin et al. (2003) also hypothesized this humor to be linked to cheerfulness, similar to McGhee's (1979) sense of humor. Self-enhancing humor involves coping with mishaps and stressors in life with a positive and humorous perspective, similar to Freud's view of a healthy defense mechanism (Freud, 1928; Martin et al., 2003). Self-enhancing humor is more intrapersonal, and allows a person to cope with the general misfortunes of life in a humorous way, making it easier to regulate negative emotions. An example of self-enhancing humor derived from the Humor Styles Questionnaire (HSQ) would be the item "My humorous outlook on life keeps me from getting overly upset or depressed about things" (Martin et al., 2003). It is also important to note that earlier theories of humor as a coping mechanism (for example, the Situational Humor Response Questionnaire, SHRQ; Martin & Lefcourt, 1984; Martin. 2009) would apply to self-enhancing humor.

However, as several earlier theories have shown, humor may also be used in ways that elicit a negative response from others, and in ways that are detrimental to one's own emotional health. Negative styles of humor have been shown to be benign or even detrimental to one's wellbeing and mental health and have been correlated with neuroticism, social anxiety, depressive symptoms, and suicide ideation (Schermer et al., 2013; Tucker, Judah, et al., 2013;

Tucker, Wingate, et al., 2013). Negative humor styles can make it difficult to connect with others, and can be a demonstration of inadequate self-esteem, and have also been linked to a specific vulnerability to depression (Frewen et al., 2008). More specifically, aggressive humor includes hostile and rude jokes. It is used to threaten or manipulate others by putting them down, and is viewed by others as argumentative and socially unattractive. Self-defeating humor, (more commonly known as self-deprecating humor) includes putting one's self down for the sake of the joke. Self-defeating humor is used to gain approval from others or to avoid one's own negative thoughts and feelings (Martin et al., 2003). This is particularly interesting as it is suggested to be related to depression and/or anxiety, and emotional neediness (Martin et al., 2003). This suggests that exhibiting humor styles that are perceived as disparaging or rude to someone else (aggressive), as well as avoidant or self-deprecating (self-defeating), can have negative consequences on the self. Not only are they seen as hurtful towards others, but negative humor styles may also hinder the social connection someone is trying to achieve through humor. Therefore, it is valuable to understand the uses of these humor styles, in order to also understand the personal and social consequences associated with them.

Depression and Humor Predictions

Recent literature suggests that self-directed styles of humor (including self-enhancing and self-defeating) are the most relevant in terms of coping with and buffering stressors in life (Cann et al., 2010; Oktug, 2017). As self-directed humor styles are defined by intrapersonal thinking and evaluation, which involves the reflection of one's self and the attempt to connect with others, it may not be surprising that self-directed humor styles have been found to be correlated with borderline personality disorder, loneliness, perceptions of social support, and spitefulness (Schermer et al., 2015, 2017; Vrabel, Zeigler-Hill & Shango, 2017; Zhao, Wang & Kong, 2014).

These findings suggest that both self-enhancing and self-defeating humor styles are crucial when looking at factors that relate to psychological well-being and mood disorders such as depression. This is also supported by recent literature linking both self-directed styles to other mood disorders such as borderline personality dimensions and (Schermer et al., 2015). The self-defeating humor style, which is associated with negative self-evaluative standards, lower social self-esteem, greater self-report loneliness, and overall lower psychological wellbeing, may be one of the strongest correlates with depression (Kuiper & McHale, 2009; Schermer et al., 2017). Increased use of the self-defeating humor style, and decreased use of affiliative and self-enhancing humor styles, have also been shown to increase depressive symptoms (Frewen et al., 2008), suggesting a humor style combination that may be predictive of depression.

The present study aims to explore humor styles and depression in an adult population in order to better understand the possible differences in the use of humor in depressed versus non-depressed individuals. Using archival data, it is hypothesized that participants who identified as being diagnosed with depression will exhibit higher levels of self-defeating humor than non-depressed participants. It is also hypothesized that individuals who have reported to have been diagnosed with depression will exhibit lower levels of both positive humor styles (affiliative and self-enhancing) than the non-depressed group. Finally, it is hypothesized that positive correlations may be found between negative humor styles (self-defeating and aggressive) with depressed affect, and that negative correlations will be found between positive humor styles (affiliative and self-enhancing) and depressed affect.

Method

Participants

Participants were 878 adults who partook in The Twin and Family Study at

The Queensland Institute of Medical Research (Queensland, Australia). Participants were given a battery of questionnaires, asking about their demographics, humor styles, overall psychological wellbeing, as well as other scales pertaining to various individual and personality differences such as the UCLA loneliness scale and NEO-Five Factor Inventory Questionnaire (Schermer et al., 2013; Schermer et al., 2017). Of the 878 participants, 145 identified as having being diagnosed with depression, leaving 733 non-depressed participants. Participants ranged in age from 23-48 years old, with 65% females and 35% males. There was no significant difference in age by sex.

Measures and Procedure

Participants completed a set of questionnaires including demographic information (age, sex, marital status, general health, and family history) as well as the scale and items described below. Randomly selecting one twin from each pair, 145 individuals were found to have stated that they were diagnosed with depression after age of 14. Responses to this item were used to distinguish the depressed versus non-depressed groups.

Humor Styles Questionnaire (HSQ; Martin et al., 2003)

The 32-item Humor Styles Questionnaire (HSQ; Martin et al., 2003) measures four constructs of humor, including: two positive dimensions, affiliative humor (engaging in humor to relieve tension, to form relationships, to be amusing), and self-enhancing humor (the use of humor to cope or regulate one's negative emotions); and two negative dimensions, aggressive humor (sarcastic or disparaging humor used without regard for other's feelings) and self-defeating humor (putting one's own self down to be humorous, gain approval, or defend one's self). The humor style model is based on the assumption that every person uses humor in ways

that are indicative of their personality traits. Affiliative humor, which may be used to enhance relationships with others (example item, "I enjoy making people laugh"), and self-enhancing humor, which may be used to alleviate one's own stress (example item, "If I am feeling depressed, I can usually cheer myself up with humor") have both been linked to positive personality traits such as openness, agreeableness, as well as psychological wellbeing and social relatedness (Martin et al., 2003). In contrast, the aggressive humor style (example item, "If I don't like someone, I often use humor or teasing to put them down") and the self-defeating humor style (example item, "I will often get carried away in putting myself down if it makes my family or friends laugh") have both been linked to constructs including hostility, and negative personality traits such as neuroticism (Martin et al., 2003). The HSQ demonstrates construct validity, correlating with other personality measures, as well as other humor scales, (Martin et al., 2003). Items in the HSQ are responded to using a 7-point Likert scale, which measures the extent to which participants disagree (1) or agree (7) with each item. Each of the four subscales consists of eight items. Martin et al., (2003) has shown that the four subscales of the HSQ are reliable, and in the present sample, the internal consistency values were .86 for affiliative, .82 for self-enhancing, .71 for aggressive, and .83 for self-defeating.

Selected Depression Items

Three items were selected from the larger battery of questionnaires given to participants as they pertain to diagnostic criteria and the DSM-5 definition of Depressive Disorders, specifically, "the feelings of sadness, emptiness or irritableness in addition to other cognitive or physiological symptoms that interfere with one's ability to function" (American Psychiatric Association, 2013). Diagnostic features as outlined by the DSM-5 updated criterion justify the use of these three items. The first item is "Sometimes I feel terribly empty inside" taken from the

PAI-BOR: Personality Assessment Inventory- Borderline Features Questionnaire (Morey, 1991). This item addresses criterion A1 of the DSM-5 Major Depressive Disorder, in which the individual feels "sad, empty, hopeless" (American Psychiatric Association, 2013). By subjective report, one may feel emptiness and tearfulness in the presence of a depressive disorder, in a period longer than 2 weeks, including loss of interest and depressed mood most of every day. The second item is "Sometimes I feel completely worthless" from the NEO-FFI: Five Factor Inventory Questionnaire (McCrae & Costa, 2004). Unrealistic negative cognitions in depressive disorders may result in disproportionate feelings of worthlessness and guilt (Criterion A7 for Major Depressive Disorder; American Psychiatric Association, 2013). This is due to the individual's hindered ability to correctly interpret day-to-day events in a neutral manner, leading in some cases to a strong sense of blame, personal defect, and worthlessness. The final item is "I am seldom sad or depressed" from the NEO-FFI: Five Factor Inventory Questionnaire, (McCrae & Costa, 2004). This item pertains to criterion A1 as well, in which the individual experiences feelings of sadness, a "down in the dumps" outlook on life (American Psychiatric Association, 2013). Due to the secondary data nature of the present study, these three items were used to generate a depressed affect scale to better justify depressive disorders beyond the single item "Diagnosed with Depression" in the demographic information, in which participants answered yes or no.

Results

The inter-correlations were assessed for possible redundancy, descriptive purposes, and possible bipolarity. Positive correlations were found between all of the four humor style scales, ranging from .09 between affiliative and self-defeating humor to .51 between social and self-

enhancing humor. Based on these correlations, the results suggest that one can score high on all dimensions of humor and therefore these constructs are not bipolar.

Sex differences and correlations with age for the humor styles

Table 1 lists the sex differences for the humor style scale scores. Specifically, males tend to use aggressive, affiliative, and self-defeating humor more than females. Age did not have robust correlations with humor styles with the correlations ranging from .03 with self-enhancing to -.08 with affiliative.

Table 1. Humor style differences for men and women.

	Men	(*N*= 951)	Women	(*N*= 1755)		
Humor Style	Mean	*SD*	Mean	*SD*	*F*	*t*
Affiliative	45.42	7.16	43.14	8.18	15.17*	7.51*
Self-enhancing	36.81	7.11	35.83	8.08	18.62*	3.14
Aggressive	28.40	7.57	23.51	6.81	16.70*	16.62*
Self-defeating	26.01	8.58	24.09	9.11	7.58	5.33*

*p<.001, two-tailed

Sex and age analyses for depression groups

Chi-square analyses showed a significant association between sex and depression status (X^2 = 67.68, p < .001). Consistent with previous literature (Nolen-Hoeksema & Girgus, 1994), females were nearly two and a half times more likely to be depressed than males, odds ratio= 2.391. Age was not significantly different for the depressed versus non depressed individuals (t = .04, p < .60).

Humor Style Differences by Depression

Table 2 provides the means for the humor styles for depressed versus non-depressed individuals. The pattern confirms the hypothesis that individuals diagnosed with depression exhibit higher levels of the self-defeating (defensive) humor style. In addition, adults diagnosed with depression tend to use positive styles of humor less than non-depressed adults, including both affiliative and self-enhancing humor. This difference was most apparent for the self-enhancing humor style. The depressed group was also found to have greater variability (based on F-tests) in the affiliative, self-enhancing, and self-defeating scales than the non-depressed group. The mean difference in aggressive humor by depression status was not significant.

Table 2. Humor style differences for depressed versus non-depressed participants.

	Depressed	(*N*= 612)	Not depressed	(*N*= 2094)		
Humor Style	Mean	*SD*	Mean	*SD*	*F*	*t*
Affiliative	42.38	8.91	44.39	7.54	35.38*	-5.56
Self-enhancing	32.93	8.86	37.12	7.15	44.27*	-12.04*
Aggressive	24.64	7.44	25.40	7.46	.88	-2.22
Self-defeating	26.77	9.92	24.18	8.59	21.93*	5.86*

*p<.001, two-tailed

Depression Affect Scale

Cronbach's alpha for the three items chosen to measure depressive affect was .53. Due to the fact that the three items originate from two different scales, the NEO-FFI utilizing a 5-point scale, and the PAI-BOR using a 3-point scale, it is expected that the alpha level is lower than

items from the same measure. It is with this in mind, that the scale was fairly reliable with respect to internal consistency for such a short scale, with items utilizing different Likert scales and measures. The mean inter-item correlation was .30 and Cronbach's alpha did not increase after the removal of any item. A scale score was created by aggregating across the three items. Men (M=6.19, SD = 2.01) were not found to differ significantly from women (M = 6.24, SD = 2.01; F=.41, t = -.75) on the depressive affect scale score. A small negative correlation was found between age and the depressive affect scale (r = -.10, p<.001).

The depressive affect scale scores were then compared for the depressed (M=7.58, SD = 2.13) versus not depressed (M=5.83, SD = 1.79) groups. A significant difference was found for both the test of variances (F = 30.48, p<.001) in that there was greater scale variance in the depressed group, and for the test of means (t = 18.58, p<.001) with higher depressive affect scale scores in the depressed group. These findings suggest that the depressive affect scale score provides an additional measure of depression for analyses with the humor styles.

The correlations between the depressive affect scale and the four humor styles revealed interesting results. Significant negative correlations were found between the depressive affect scale score and the two socially positive humor styles of affiliation and self-enhancing. These results may suggest the two socially positive styles of humor serve as a protective factor against depression. In contrast, the depressive affect scale had positive correlations with the socially negative humor styles of aggressive and self-defeating. This may be reflective of a defensive characteristic of depressed individuals.

Discussion

The present study furthers our understanding of how humor relates to depression. Humor styles that are detrimental to psychological well-being, in particular self-defeating humor, are

associated with depression and higher scores on the depression affect scale. Individuals diagnosed with depression also tend to not use positive styles of humor as often as the non-depressed individuals. The use of aggressive humor was not significantly different between depressed and non-depressed individuals, likely because this type of humor has more to do with hurting other's than hurting one's self (Martin et al., 2003). If someone uses aggressive humor, disregarding other's feelings, it could also imply that they are not employing the self-awareness needed to control the desire to ridicule or tease. Aggressive humor has been positively linked to neuroticism and negatively correlated with conscientiousness (Schermer et al., 2013). Therefore, this type of humor may have less to do with depression and one's intrapersonal interactions, and more to do with general aggression and a lack of awareness towards others. Therefore, in accordance with previous research, not only do these humor style patterns represent vulnerability to depression (Frewen et al., 2008), they also relate to the behaviors after the diagnosis of depression as well. Further research by Stockton et al. (2016) showed that self-enhancing humor, as well as affiliative humor, has been positively correlated with reasons for living and gratitude.

Age was found to not correlate significantly with humor styles, consistent with previous findings (Martin et al., 2003), suggesting that there were no generational differences for humor styles in the present sample which may not be surprising as the age range was quite narrow. Age also did not have a significant relationship with depression. Females were nearly two and a half times more likely to be depressed, consistent with the literature showing that women are more vulnerable to depressive symptoms, as well as depression in general (Frewen et al., 2008; Nolen-Hoeksema & Girgus, 1994).

The short depressive affect scale was positively correlated with the two negative styles of humor and negatively correlated with the two positive styles of humor, showing further

consistency that those affected by depression tend to stray away from positive humor. These results may not be too surprising as self-enhancing humor has been shown to correlate with positive affect and self-defeating humor has been shown to strengthen the relationship between life stress and depression (Tucker et al., 2013). Self-defeating humor has shown to specifically strengthening the link between social anxiety and depression outcomes (Tucker et al., 2013), and is related to emotional exhaustion from stress on the job (Oktug, 2017). Self-defeating humor involves self-disparaging acts which are used to gain approval from others and to avoid the underlying negative thoughts and feelings an individual may have about their self which may result in more feelings of emptiness and depression (Rnic, Dozois & Martin, 2016). As noted in Barrett and Barber (2007), depressed individuals surprisingly tended to be more nurturing, likely as a means to form strong social connection at a time of perceived social isolation. Self-defeating humor may, therefore, have its roots in depression itself, showing that these individuals use humor in an attempt to alleviate feelings of emptiness and sadness. However, because the style of humor they use is essentially socially negative, the attempt is in vain. Coyne's (1976) interpersonal theory of depression supports this hypothesis, showing that depressed individuals seek reassurance from others, but then doubt this reassurance afterward (Coyne, 1976; Zuroff, Mongrain & Santor, 2004). Therefore, the use of self-defeating humor may actually hinder the depressed individual's ability to overcome their self-doubt and sadness. Self-defeating humor is therefore an important area to understand in future research investigating mood disorders, and the aspects of these disorders such as distorted cognitions, psychological well-being, and treatment.

Limitations and Future Research

In this study, participants self-reported to be diagnosed with depression, therefore, there is a possibility that some participants were diagnosed as well, but did not report as such. Ideally independent verification of depression diagnoses should be obtained in future studies, although as this study utilized secondary data, this was beyond the scope of this study. Also, the participants in this study were diagnosed with depression after the age of 14. Due to the cross-sectional nature of this data, it is unknown whether these participants had stable humor styles before the diagnosis of depression, which limits this research's conclusions. Also, since there are several different forms of depression (eight possible categories as calculated by the current DSM-5 classifications), future research may also want to investigate different types of depressive disorders in order to clarify the relationship between humor styles and MDD versus other forms of depression. Finally, the Humor Styles theory has laid a strong foundation for the future of humor research. However, as Martin et al. (2003) note, this theory must also confront several other forms of humor beyond the four constructs. A humor that should be investigated further may be "dark humor", a type of humor dated back to Shakespearean literature, which can be best exposed in crisis or trauma-inducing situations. Dark humor may have roots in both aggressive or self-enhancing constructs, and warrants further investigation.

Conclusions

As predicted, the self-directed humor styles, which include self-enhancing and self-defeating humor, had the strongest relationships with depression and depressed affect, both with respect to mean differences and correlational strength. This area warrants further research, in order to understand the effects of humor on the self, specifically when there is a presence of mood disorders. As humor research gains more traction, it is important to keep in mind that humor is a way to show one's thoughts and feelings. The social and personal aspects of humor

give insight into how an individual may think of themselves and others. Due to the scope of this study, future research hopes to delve deeper into the effects of humor in mood disorders.

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Curriculum Vitae

Skills Profile

- Skilled in quantitative statistics and Microsoft Office suite
- Proficient in public speaking, communication & teaching skills
- Highly efficient in time management & experience with translating knowledge to a variety of stakeholders.
- Detail-oriented & conscientious

Education

Masters of Science in Health and Rehabilitation Sciences (June 2018)
University of Western Ontario

Bachelor of Arts Honours in Psychology with Thesis (2016)
University of Windsor, Ontario

Research Experience

Behaviour Processing & Personality **February 2018- April 2018**
DAN: Department of Management & Organizational Studies, Western University
COPD Patient Learning Study **September- 2016- September 2017**
Lawson Health Research Institute, Western University
Competence, Coping, and Intervention Research Lab **September 2014 – August 2016**
Child & Adolescent Psychology, University of Windsor
Higher Education Quality Council of Ontario (HEQCO): Ontario College Recruitment of Underrepresented Groups **Fall 2014 – Winter 2015**
University of Windsor
Center for Culture and Organizational Research **June 2015- August 2016**
Industrial & Organizational Psychology, University of Windsor

Teaching Experience

Teaching Assistant: Objective Structured Clinical Examination (OSCE) **July 2018**
Manipulative Physical Therapy (MCISc)
Teaching Assistant: Objective Structured Clinical Examination (OSCE) **July 2018**
Wound Healing (MCISc)
Teaching Assistant: Advanced Quantitative Research Methods **September 2017- December 2017**
School of Physical Therapy, University of Western Ontario
Teaching Assistant: Health Issues in Aging **Winter 2017-Spring 2017**
Faculty of Health Sciences, University of Western Ontario
Teaching Assistant for Effective Writing II **Winter 2016- Spring 2016**
Faculty of Arts, Humanities and Social Sciences, University of Windsor
Teaching Assistant for Effective Writing I **Fall 2015- Winter 2015**
Faculty of Arts, Humanities and Social Sciences, University of Windsor

Publications

Kfrerer, M.L., Martin, N.G., & Schermer, J.A., (in press). A Behavior Genetic Analysis of the Relationship between Humor Styles and Depression. *International Journal of Humor Research*.

Maskell, R., Rudkovska, A., Kfrerer, M., & Sibbald, S., (2017). Collaborative care models for integrating mental health and primary care: A policy overview. *University of Western Ontario Medical Journal*, 86(2),13-15.

Rudkovska, A., Sui, W., Kfrerer, M. (in press). Catheter Re-Use: Thrifty or Threatening? A Commentary on Intermittent Catheter Re-Use by Individuals with Spinal Cord Injury (SCI). *Health Science Inquiry*.

Conference and Scholarly Presentations

Kfrerer, M. (January 2017) *The Relationship between Humor Styles and Depression*. Oral presentation at University of Western Ontario, Health and Rehabilitation Sciences Graduate Research Conference.
Kfrerer, M. (May 2016) *The Basis for Ethical Perceptions in the Workplace.* Poster presented at 2016 Ontario Undergraduate Thesis Conference (Wilfred Laurier University, Waterloo, Ontario).
Kfrerer, M. (April 2016) *The Basis for Ethical Perceptions in the Workplace.* Poster presented at Honours Thesis Poster Conference (University of Windsor, Windsor, Ontario).

Volunteer Experience

Community Engagement & Public Relations at Best Buddies Chapter **September 2014- April 2016**
University of Windsor
Crisis Interventionist at Victim Services Middlesex-London **January 2018- June 2018**
In collaboration with London-Middlesex Police
Autism Services Inc. Bruce Awad Summer Program **May 2016- July 2016**

Organizational Skills and Relationship Development

TransformSSO: Shared Services Organization **May 2016- August 2016**
Chatham, Ontario
The Faculty Association **September 2013- April 2015**
University of Windsor
Respite Provider: Summer Placement **April 2015- August 2015**
Point Pelee National Park- Park Visitor Coordinator **May 2013- August 2015**

Related Awards/Certifications

- Peer Buddy Leadership Award 2016- Best Buddies University of Windsor Chapter
- Crisis Interventionist (Victims Services Middlesex-London)
- Vulnerable Sectors Police Clearance (2018-2019)
- First Aid & CPR Certified (2018)