MEME SHARING "CULTURE" AND PSYCHOLOGICAL WELL-BEING FROM A NEUROSCIENTIFIC FRAMEWORK

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Abstract

Memes are cultural replication units of social experiences that use humor to become viral. Neural systems are involved in social media use. To explore the relationship between psychological well-being (PWB) and meme-sharing behavior, I administered a questionnaire containing the PWB Scale, the Mood regulation and Escape subscales, and mental health-related memes to 249 Puerto Rican residents. I established five hypotheses that were tested with an Independent samples t-test, a one-way ANOVA, and Pearson's correlation. The results demonstrate that individuals with lower PWB tend to share mental health memes to release tension/distract from problems.

Keywords: memes, internet, social media, psychological well-being, cognitive neuroscience

Resumen

Los memes son replicaciones culturales que utilizan humor para volverse virales. Hay sistemas neuronales involucrados en el uso de redes sociales. Para explorar la relación entre el bienestar psicológico (BP) y compartir memes, administré un cuestionario en-línea que incluyó la Escala de BP, las subescalas de Regulación del Ánimo y de Escape, y memes de salud mental. Establecí cinco hipótesis las cuales fueron examinadas con una prueba t de muestras independientes, un ANOVA unidireccional y correlaciones de Pearson. Los resultados demuestran que las personas con menor PWB tienden a compartir memes de salud mental para liberar tensiones/distraerse de sus problemas.

Palabras claves: memes, internet, redes sociales, bienestar psicológico, neurociencia cognitiva

Meme sharing "culture" and psychological well-being from a neuroscientific framework

In our modern world, Internet and social media use has become an essential part of our daily lives by creating a space for virtual social interactions. According to Hootsuite's Global Report (2019), 57% of the world's population are internet users and 45% are active social media users. The average daily time of social media use is 2 hours and 16 minutes; hence, social networking is part of the daily routine of many people. As recompiled in this Global Social Media Report, most social media users are young (59%) from ages 18-34 (Hootsuite, 2019). This report also states that the top three most used social platforms are Facebook, YouTube, and WhatsApp (Hootsuite, 2019). One of the key behaviors in these social networks is sharing content. Particularly, sharing memes has become very popular, which are humorous images shared massively in social media. As meme-sharing gains popularity, humorous content regarding mental health and psychological well-being are also shared.

Memes are more than just a funny image. The term meme was introduced in 1976 by British evolutionary biologist Richard Dawkins in his work *The Selfish Gene*. According to Dawkins (2006), memes are a cultural parallel to biological genes. They act just like genes, but in culture: they carry information, are replicated, and are transmitted from one person to another (Dawkins, 2006). In culture, memes can be an idea, a skill, a behavior, a phrase, or a fashion. Memes are transmitted and replicated through all forms of communication: verbal, visual, or electronically. When Rogers (2019) examines Dawkins, the author expresses that the memes that are most successful in being copied and transmitted become the most prevalent within a culture. In the early 21st century, Internet memes gained popularity. These memes spread by imitation in various types of Web sites though pictures, videos, or other media. Therefore, the modern definition of meme is "an image, video, or piece of text typically humorous in nature, that is copied and spread rapidly by Internet users, often with slight variations" (Oxford University Press, 2019).

Literature Review

There has been research about how memes, from Dawkins's biological perspective, affect mental illnesses. Specifically, Leigh (2010) explains in his book that memes enter the brain through bits of information and can be transcribed and translated into different forms of language or sensation. Leigh explains that memes work like

epigenetics, because they act as environmental factors that influence one's gene expressions over time.

Previous studies suggest that smartphone and social media use is an essential part of young people's daily life. According to Botterill et al. (2015), youth have a constant challenge of time management in the modern world. Due to these challenges, social networking allows youth to interact with others and socialize without having to schedule or meet up physically. Botterill et al. (2015) study with undergraduate college students in Canada found that "the extensive use of social media by millennials is a symptom of the challenge of social synchronization in fragmented times" (p. 549). Essentially, due to the rush of daily modern life, teenagers and young adults rely on social media to make social interactions less difficult. Thus, the increase of social media usage reflects how society has "fragmented" or distanced human connections. However, social media provides a virtual space for the youth to be able to connect with others at anytime and anywhere.

Kross et al. (2013) studied how Facebook use predicts declines in subjective well-being in young adults. Specifically, subjective well-being refers to how people experience and evaluate the quality of their lives and specific domains and activities (Diener et al., 1997). In Kross et al. study (2013), the researchers utilized various scales to measure subjective well-being, such as the Satisfaction with Life Scale, the Beck Depression Inventory, the Rosenberg Self-Esteem Scale, and the Social Provision Scale. Thus, subjective well-being is a conglomeration of factors that attribute to one's sense of wellness. Results from this study suggest that Facebook use may be associated to a decline in subjective well-being, but it may also help to reduce tensions, which in turn lead to a more frequent use of that social media. Therefore, it can be questioned how it is possible that Facebook use can decline subjective well-being, yet be used to reduce tensions.

In another study, the authors found that the most shared memes on Facebook are those that are *self-defeating* (Taecharungroj & Nueangjamnong, 2015). These types of memes are used to express humor by making fun of himself/herself in a negative way. According to the authors, these memes "meet the need of the people to communicate and express one's thoughts and feelings" (p. 300). In fact, a study examined whether individuals experiencing significant depressive symptoms would differ from non-depressed controls in their interpretation of internet memes related to depression (Akram et al., 2020). The authors found that the perception of humor, relatability, shareability and mood improving potential of depressive memes were all greater in individuals with depression symptoms. These results were more frequent amongst individuals with symptoms of depression in comparison to non-

depressed controls. These findings highlight how depressed individuals may share these aggressive or self-defeating memes to cope with their negative emotions and interact with others that may feel the same way.

In Puerto Rico, research on memes as a coping mechanism in tragedies or times of uncertainty are starting to be studied (Flecha Ortiz et al., 2020; Gil-Rodríguez, 2018; Ríos Picorelli, 2020; Rodríguez, 2018; Rodríguez Soto, 2020). These studies demonstrate how Puerto Rican individuals come together in times of austerity, colonialism, political injustice, corruption, and uncertainty. Humor, across the literature, is exhibited as a coping mechanism and liberation of psychological tensions. Furthermore, creating, sharing, and interacting with these political and humorous memes strengthens the sense of community in Puerto Rican culture.

Framework

Social Media and Neuroscience

The *Emerging Neuroscience of Social Media* is a framework proposed by Meshi et al. (2015) to study social media through the neurocognitive sciences. The authors explain that most people use social media for two primary reasons: (1) to connect with others; and (2) to manage the impression they make on others. By social networking, one interacts with others and create groups. According to the authors, these groups increase the potential not only to survive, but also thrive. Inside these groups, strong social bonds are made, which enhance psychological well-being and protect individuals from feelings of loneliness and depression (Meshi et al., 2015). Social media allows one to connect with others via five key behaviors: (1) broadcast information, (2) receive feedback, (3) observe the broadcasts of others, (4) provide feedback, and (5) compare with others (Meshi et al., 2015). These behaviors rely primarily on three domains: social cognition (i.e., mentalizing), self-referential cognition, and social reward processing (Figure 1).
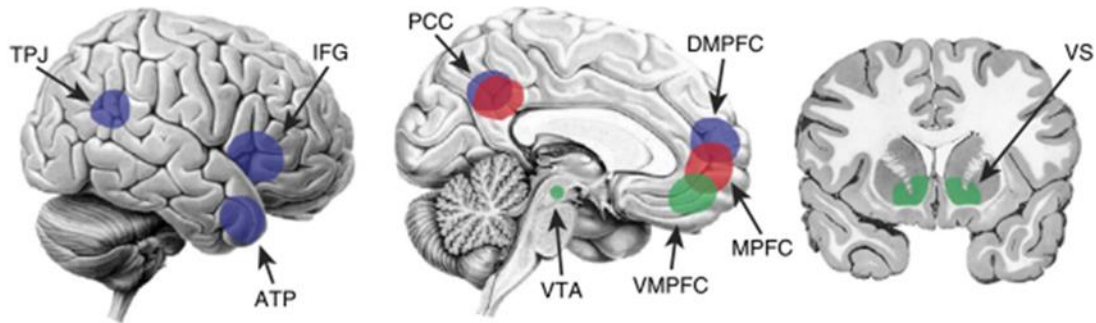
FIGURE 1: PROPOSED BRAIN NETWORKS INVOLVED IN SOCIAL MEDIA USE

NOTE: EXTENSIVE NEUROIMAGING RESEARCH INTO SOCIAL COGNITION WITH OFFLINE PARADIGMS HAS REVEALED SEVERAL KEY BRAIN NETWORKS THAT MAY BE INVOLVED IN SOCIAL MEDIA USE. (1) THE MENTALIZING NETWORK (BRAIN REGIONS IN BLUE): DORSOMEDIAL PREFRONTAL CORTEX (DMPFC), TEMPOROPARIETAL JUNCTION (TPJ), ANTERIOR TEMPORAL LOBE (ATL), INFERIOR FRONTAL GYRUS (IFG), AND THE POSTERIOR CINGULATE CORTEX/PRECUNEUS (PCC); (2) THE SELF-REFERENTIAL COGNITION NETWORK (BRAIN REGIONS IN RED): MEDIAL PREFRONTAL CORTEX (MPFC) AND PCC; AND (3) THE REWARD NETWORK (BRAIN REGIONS IN GREEN): VENTROMEDIAL PREFRONTAL CORTEX (VMPFC), VENTRAL STRIATUM (VS), AND VENTRAL TEGMENTAL AREA (VTA).

SOURCE: ADAPTED AND REPRODUCED, WITH PERMISSION (MESHI ET AL., 2015).

Humor Relief Theory

Memes are humorous images that are shared in social media. It is hypothesized that by sharing this humorous content there can be a relief of psychological tensions. The relief theory states that people experience humor and laugh because they sense stress has been reduced in a certain way. Humor use results as a release of nervous energy. This tension reduction may engender humor by reducing the state of arousal (the "jag" theory) or increasing the arousal (the "boost" theory), depending on the perspective. Some elaborations of the relief theory hold that humor may result from releases of energy that subconsciously overcome sociocultural inhibitions (Meyer, 2000).

Psychological Well-Being

According to my hypothesis, the release of these psychological tensions will lead subsequently to a psychological well-being. There are six distinct components of psychological well-being (Ryff & Keyes, 1995). Self-Acceptance can be defined as the positive evaluations of oneself and one's past life. Second, Personal Growth is a sense of continued growth and development as a person. Third, Purpose in Life is the belief that one's life is purposeful and meaningful. Fourth, Positive Relations

with Others is the possession of quality relations with others. Fifth, Environmental Mastery is the capacity to effectively manage one's life and surrounding world. Lastly, Autonomy is the capacity that one has a sense of self-determination (Ryff & Keyes, 1995). PWB is attained by achieving balance affected by both challenging and rewarding life events. Therefore, this construct will be used to measure the interaction of PWB with sharing memes in social media.

Research Significance

There is a gap in research aimed to explain the psycho-social mechanisms that underlie social media use, specifically, sharing memes. Past research shows that social media use may lead to addiction, antisocial behaviors, low self-esteem, and other declines on psychological well-being (Caplan, 2007; Dalvi-Esfahani et al., 2019; Gámez-Guadix et al., 2013; Odacı & Kalkan, 2010; Saaid et al., 2014;). Few studies have examined social media use from a psychological perspective in Puerto Rico. Therefore, this study aims to explore the relationship between meme-sharing and PWB among a sample of young people living in Puerto Rico. Results from this study could contribute to create a working model to study social media use in Puerto Rico, utilizing the Emerging Neuroscience of Social Media.

Hypotheses

Since our literature review suggests that sharing self-defeating memes is a common practice in young social media users, especially for those with depression symptomatology, we hypothesize that: (1) participants that share mental health-related memes have a lower PWB than those who do not, (2) participants that share mental health-related memes are younger than those who do not, (3) participants that share memes to escape from their reality and to regulate their mood have a lower PWB, (4) participants with lower PWB tend to share mental health memes to liberate their psychological tensions and get help from others, (5) participants with lower PWB may find self-defeating memes funnier and more relatable than those with higher PWB.

Method

This study was authorized by the University of Puerto Rico – Rio Piedras Campus IRB under the standards of ethical research with human participants. All the

collected information is confidential, anonymous, and was recorded securely in Google Forms.

Participants

Inclusion criteria for this study were being 18 years old or above, being a resident of Puerto Rico, and having the ability to read and understand Spanish. Participants were recruited through online posts in social media, emails, and flyers posted in public spaces. The questionnaire and flyer were posted in Facebook, Twitter, Instagram, and sent through multiple chats in WhatsApp. Participants also forwarded or re-shared the questionnaire. Additionally, the questionnaire was sent through the University of Puerto Rico's institutional email.

In total, two hundred and forty-nine Puerto Rican residents from ages 18 to 62 years participated in this study. One-hundred and ninety-seven (79.1%) participants identified themselves as women, 50 (20.1%) identified as men, and two (0.8%) were non-binary. The majority of the sample consisted of young adults between the ages of 18 to 25 (77.9%) or aged 26-35 (14.1%). About 93.6% of the sample was 40 years old or younger. The average age was 24.64 ($SD = 7.74$). About 81.9% of the sample were college students, mostly from a public university ($n = 160$), and mostly enrolled in a bachelor program ($n = 154$).

Measures

Overall, the self-report online questionnaire had 54 questions and took about 10-15 minutes for completion. In addition to questions to collect basic socio-demographic data, the following measures were included in the questionnaire.

Psychological Well-Being Scale (PWB)

The PWB Scale, specifically the short version translated into Spanish by González Rivera et al. (2016), contains 17 Likert scale-type questions and yields a score ranging from 17 of 102. The scale goes from 1 to 6 (this being 1 = strongly disagree, 2 = disagree, 3 = mostly disagree, 4 = mostly agree, 5 = agree, 6 = strongly agree). It consists of four subscales: Environmental Mastery (EM), Purpose in Life (PL), Self-Acceptance (SA), and Autonomy (AT). The instrument is scored by summing the results. This scale has a maximum score of 102.

Experiences of Sharing Memes in Social Media

This section consisted of 14 questions about the experiences, interpretations, and purposes of sharing memes in social media. The section starts by asking the perceived time individuals consider that they share memes per day (1 = almost never, 2 = less than 30 minutes, 3 = between 30 minutes and 1 hour, 4 = between 1 to 2 hours, 5 = between 2 to 3 hours, 6 = 3 or more hours a day). Participants also had to answer what social media they use the most to share memes. Also, we included questions asking the main reasons for which they share memes. Furthermore, we included an item asking the participants if they share mental health memes or not. If participants considered that they shared mental health memes, they were then asked why they believe they share this type of content online.

Additionally, this section included the *Escape* subscale from the Social Media Use Disorder Scale (van den Eijnden et al., 2016) which consisted of three yes (1) or no (0) type questions that were adapted to sharing memes on social media. Specifically, these questions asked if the participants share memes online to forget about their problems, to not have unpleasant thoughts, and escape negative feelings. We also adapted the subscale *Mood Regulation* from the Generalized Problematic Internet Use Scale 2 (translated into Spanish by Gámez-Guadix et al., 2013) to meme sharing. This subscale consisted of three Likert-type questions with scoring options that range from 1 to 6 (this being 1 = totally disagree, 2 = mostly disagree, 3 = fairly disagree, 4 = fairly agree, 5 = mostly agree, 6 = totally agree). This subscale assessed if the participants shared memes online to reach out to others when feeling lonely, and to feel better when sad or angry.

Meme Interpretation

The survey questionnaire concludes with six memes related to mental health. For the purpose of this study, a mental health-related meme is a humorous image that refers to one's feelings of PWB and relationships with others. These images were recompiled from Facebook pages that post mental health-related memes. We also searched keywords in Google such as "wholesome", "positive", "depressive", and "self-defeating" memes. The first three memes were self-defeating or negative memes, which had content referring to depression symptomatology (See Figure 2). The other three memes were "positive" or "wholesome" memes, which referred to maintaining relationships with others, wanting affection, and providing affection to others (See Figure 3). We did not include memes with explicit content (i.e., explicit language, drug use) or content that may be too triggering for the participants (i.e., suicide, abuse). Only memes in Spanish were included in the questionnaire. Each

meme was evaluated by the participants according to their humor from 1 to 5 (1 = unfunny, 2 = not so funny, 3 = neutral, 4 = somewhat funny, 5 = very funny). They also scored it by how identified they felt with the image (1 = not identified, 2 = not very identified, 3 = neutral, 4 = somewhat identified, 5 = very identified). Lastly, they would choose if they would share the meme or not in their social media of preference.

FIGURE 2: SELF-DEFEATING MEMES

SOURCE: MEMES RECOMPILED FROM FACEBOOK PAGES. FROM LEFT TO RIGHT: NANCY RISAS (N.D.), MEMES TOPITO2019 (2021), AND TÍO INDIE 505 (2019).

FIGURE 3: POSITIVE OR "WHOLESOME" MEMES

NOTE. EVEN IF THESE IMAGES WERE INTENDED TO BE POSITIVE IN CONTENT, N4 AND N6 SHOW AGGRESSIVE BEHAVIOR THAT MIGHT BE CATEGORIZED AS NEGATIVE. HOWEVER, THESE ARE CONSIDERED POSITIVE BECAUSE THEY DEMONSTRATE LOYALTY AND AFFECTION. FURTHERMORE, N5 SHOWS A MAN THAT MAY LOOK SAD; HOWEVER, THE MEME ILLUSTRATES A NEED FOR CARE AND PHYSICAL AFFECTION.

SOURCE: MEMES RECOMPILED FROM FACEBOOK PAGES. FROM LEFT TO RIGHT RAMIIRO (2019), MAC DEMARCO MEMEX (2019), AND DOPL3R (2017).

Data Analyses

All statistical analyses were performed using the Statistical Package for the Social Sciences V 26. Descriptive statistics were first utilized for the sociodemographic information and to explore the distribution of the other variables. To assess the reliability of the measures, Cronbach's alpha was utilized. To answer my H1 and H2, two Independent Samples t-tests were conducted. The first one examined the differences in mean PWB between those who share mental health memes and those who do not. The second Independent Samples t-test examined the differences in average age between those who share mental health memes and those who do not. To answer our H3, I ran a one-tailed Pearson Correlation to assess the relationship between the Escape and Mood Regulation subscales with PWB. Subsequently, for my H4 I explored the relationship of Psychological Well-Being with the purposes of sharing mental health memes on their social media utilizing a One-way ANOVA. For my H5, a one-tailed Pearson Correlation was conducted to explore the interaction between humor and identification with memes, with the total score of Psychological Well-Being. A significance level of at least .05 was employed for all statistical tests.

Results

Psychological Well-Being

This instrument had a high internal reliability (α = .86) in the current sample used. The distribution of PWB Total scores significantly differed from a normal distribution (Kolmogorov-Smirnov Test = .067, p = .008). The mean score was 74.60 (see Graph 1). To better describe the distribution of PWB sub scores, we divided the scores from this sample into four groups: high well-being ($\geq$87; n = 41), above average ($\geq$76 but <87; n = 87), below average ($\geq$63 but <76; n = 82), and low well-being (<63; n = 39).

Mean = 74.60
Std. Dev. = 12.493
N = 249
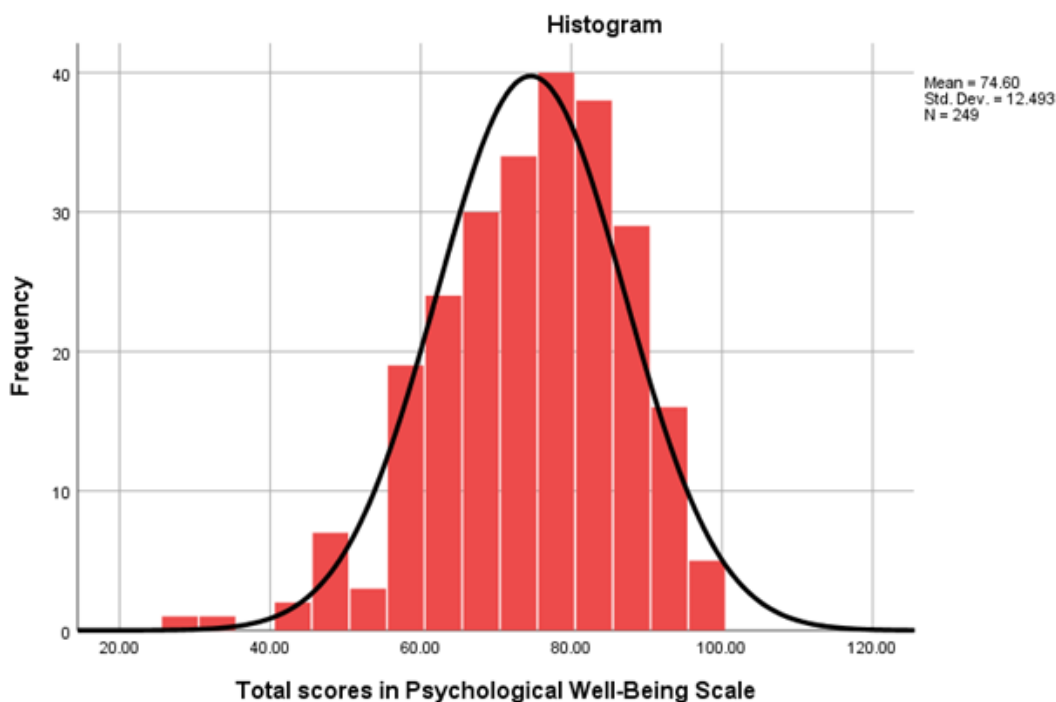
GRAPH 1: TOTAL SCORES IN PSYCHOLOGICAL WELL-BEING SCALE

SOURCE: THIS GRAPH WAS GENERATED THROUGH SPSS WITH THE RESULTS OF THIS STUDY.

Experiences in Meme Sharing

Time per day sharing memes in social media

Almost 1 of every 4 participants (24.3%) answered that they spent between 2-3 hours a day sharing memes on their social media. However, the median time spent on

social media to share memes, according to this sample, was between 1-2 hours a day. Six participants did not answer this question.

Social media of preference

The majority (75%) of the sample prefers to use Facebook to share and post their memes online, followed by Twitter (13.9%), Instagram (7.4%), Reddit (2.5%), Tumblr (0.8%), and lastly 4chan (0.4%). Five participants did not answer this question.

Why share memes online?

The majority (64.5%) of the sample reported that they share memes for fun and entertainment. In addition, 14.1% of the participants affirmed that they share memes for humorous reasons. Although, it should be noted that these first two options are very similar in nature, meaning that humor and entertainment are much alike. Third, 7.3% answered that they shared memes to feel better about their surroundings and 5.6% to distract themselves from their reality. Twenty participants (8.1%) answered that they shared memes online to interact with their colleagues and make new friends.

Escape

This subscale consisted of 3 yes or no questions asking if during the past year, they share memes on social media to (1) forget about problems, (2) not think about unpleasant things, and (3) escape from negative feelings. "Yes" was scored as a one and "no" as a zero. This subscale had a high reliability ($\alpha = .84$). In this sample 40.5% scored zero, 13.4% got one point, 15.4% got two points, and 30.8% got three points total ($M = 1.36$, $SD = 1.29$). Two participants did not answer. Also, there was a statistically significant negative correlation between the total score of Escape and PWB, $r(246) = -.277$, $p < .001$. This means that the lower the PWB, the more participants tend to share memes to escape from their psychological disturbances.

Mood Regulation

This subscale consisted of three Likert type questions scored from 1 (totally disagree) to 6 (totally agree). Participants' scores were classified into these categories: below average 3-7 (27.3%), average 8-13 (45.0%), and above average 14-18 (27.7%). This subscale showed a high reliability ($\alpha = .80$). The mean score of the sample was 10.35 ($SD = 4.35$). There was a statistically significant negative

correlation between the total score of Mood Regulation and PWB, $r(246) = -.244$, $p < .001$. This means that the lower the PWB, the more participants tend to share memes to regulate their mood.

Sharing mental health memes

More than half (56.6%) of the sample share mental health memes on their social media. According to the Independent Samples t-test, the null hypothesis regarding means differences was rejected ($t(242) = -2.654$, $p = .008$). Therefore, there is a significant difference in means scores in the total score of PWB between those who share mental health memes ($M = 72.72$, $SD = 12.48$) and those who do not ($M = 76.98$, $SD = 12.48$). The "true" differences in means between the two groups can vary between -7.42 and -1.10 with a 95% confidence interval (CI). Furthermore, the average age of those that share mental health memes in our study is younger ($M = 23.51$, $SD = 6.70$) than those that do not ($M = 26.12$, $SD = 8.82$). According to our Independent Samples t-test ($t(190) = -2.54$, $p = .012$), the differences in means between the results of both groups can vary between -4.57 and -0.66 with a 95% CI.

In terms of the why individuals share mental health memes on social media, 5.7% answered that they share this content because other people do and find it funny. Only two people answered, "so other people can help me," however, these individuals had the lowest PWB from the group (See Table 1). Furthermore, 28.5% answered "so other people that are going through the same problems as me could relate" and 21.5% chose "to liberate my tensions and/or distract myself from my personal problems". Ninety-nine (43.4%) participants stated that they do not share mental health memes. Twenty-one (8.4%) participants did not answer. Additionally, according to our One-way ANOVA, there was a barely significant relationship between PWB and the purposes of sharing mental health memes [$F(4, 223) = 2.42$, $p = .05$]. A Fisher's Least Significant Difference post hoc test revealed that that those who did not share memes had a higher PWB (9.76 ± 1.26 min, $p = .01$) in comparison to participants who share memes to release tension or distract themselves from their problems.

Reasons for sharing mental health memes	N	Mean PWB	SD	SEM	95% CI	
					Lower	Upper
Because everybody else does it and find it funny	13	74.31	13.59	3.77	66.09	82.52
So other people can help me	2	60	1.41	1	47.29	72.71
So other people that are going through the same problems as me could relate	65	74.18	12.24	1.52	71.15	77.22
To liberate my tensions and/or distract myself from my personal problems	49	71.41	12.03	1.72	67.95	74.86
I don't share mental health memes	99	76.92	12.45	1.25	74.44	79.40
Total	228	74.66	12.25	.83	73.03	76.29

TABLE 1: DESCRIPTIVE STATISTICS FOR SUBGROUPS
DEFINED BY THEIR MENTAL HEALTH MEME-SHARING BEHAVIOR

Evaluation of Memes

Humor

According to the participants' ratings of how humorous they found the memes, from the six images presented, the two funniest memes were N2 ($M = 3.68$, $SD = 1.30$) and N4 ($M = 3.78$, $SD = 1.23$). N4 was found the most humorous of all. This meme (N4) was intended to be "positive" and not self-defeating (see Figure 3). We also summed a total score of the Humor scale and correlated it to the PWB Total score. There was a small but significant inverse relationship between PWB and how humorous the participants found these images ($r(248)= - .259$, $p < .001$). Therefore, the less PWB in this sample, the funnier they found the memes.

Self-identification

 The same two images (N2 and N4) were the most relatable of all. The most relatable image was N2, a self-defeating meme ($M = 3.56$, $SD = 1.30$), and N4 in second place ($M = 3.08$, $SD = 1.51$) according to our Self-identification scale. We also summed a total score of this scale and correlated it to the PWB Total score. There was a small but significant inverse relationship between PWB and how relatable the participants

found these images ($r(248) = -.321$, $p < .001$). Therefore, the less PWB in this sample, the more they relate to these memes.

Sharing Memes on Social Media

According to the participants' answers, memes N2 (64.8%) and N4 (53%) where also the two most frequently considered to be shared online.

Discussion

This study examined the relationship of PWB between sharing mental health memes, humor, self-identification, and motivations for meme-sharing. In alignment with Akram and colleagues' (2020) study, our results demonstrate that participants that share mental health-related memes have a lower PWB in comparison with those who do not. Thus, there is a need in this population to share this type of content in their social media. Individuals that share mental health-related memes in their social media connect with others through the five key behaviors established by Meshi and colleagues' (2015) neuroscience of social media. Therefore, these individuals (1) share mental health memes online, (2) receive feedback from these memes, (3) observe the content shared by others, (4) provide feedback, and (5) compare themselves with others. Understanding that these behaviors take place in neural pathways (See Figure 1), especially social reward processing, future research may explore the neural mechanisms of meme-sharing and potential reward processes.

Additionally, our results indicate that participants with lower PWB tend to share memes to escape from their reality and regulate their mood. Specifically, there is a statistically significant weak inverse correlation between having a lower PWB score and sharing memes to escape reality and mood regulation score. It is important to take into consideration that these subscales were adapted from the Social Media Use Disorder Scale (van den Eijnden et al., 2016) and the Generalized Problematic Internet Use Scale 2 (translated into Spanish by Gámez-Guadix et al., 2013) to meme sharing. Therefore, these scales may evaluate problematic or addictive tendencies in social media usage. In essence, there may be an addictive component in meme-sharing due to its escapist capacities.

It was observed that individuals with lower PWB scores tend to share memes to seek help from others, liberate their tensions, and distract themselves from their problems. According to our one-way ANOVA, a significant lower PWB was observed among those who share memes to release tension or distract themselves from their problems

in comparison to those who do not share mental health-related memes. From these results, we can infer that those with low PWB may have a greater need to liberate stressors, while those with a higher PWB do not. This means that a main motive of sharing memes related to mental health is to cope with stressors and control one's emotions. These results may align with past research that has demonstrated how sharing memes may be a collective coping mechanism to subsist difficult times, especially in Puerto Rico (Flecha Ortiz et al., 2020; Gil-Rodríguez, 2018; Ríos Picorelli, 2020; Rodríguez, 2018; Rodríguez Soto, 2020).

Although the relationship between the participants' PWB and the purposes of sharing mental health memes was barely significant, the second option: "so other people can help me" had lowest mean of PWB (see Table 1). Therefore, not only do participants with lower PWB share this type of content to feel better, but also to receive guidance from others. Meshi et al. (2015) established that social networking allows individuals to interact with others and create groups. Therefore, these groups increase social bonds, which enhance PWB and protect individuals from feelings of loneliness and depression. Through meme-sharing, individuals establish connections by posting relatable content.

Although we proposed that most participants would share mental health memes to liberate tensions, a 28.5% of the sample answered that they share them so other people could relate to their experiences, and this was the most frequent reason endorsed within that question. In comparison, 19.7% of the sample answered that they share mental health memes to liberate their tensions. Additionally, when examining another question about memes in general, we found that the vast majority (64.5%) of the sample chose that they share memes (not specifically mental health memes) for fun and entertainment. Sharing memes for fun could also be related to a need to escape from tensions and a coping mechanism through humor.

As stated in previous literature (Botterill et al., 2015; Kross et al., 2013; Meshi et al., 2015), our results evidence that social media provides a space for youth to express themselves, cope with their environment, obtain feedback from others, and battle feelings of loneliness. According to Botterill et al. (2015), youth use social media to battle the challenges of daily life. This can be observed and remarked in our study because the average age of those that share mental health memes in our study is younger ($M = 23.51$, $SD = 6.70$) than those that do not ($M = 26.12$, $SD = 8.82$). By analyzing out results, youth use social media to cope with the many challenges of life, including those related to psychological tensions.

The catharsis of psychological tensions is also related to the use of humor in meme-sharing (Akram et al., 2020; Taecharungroj & Nueangjamnong, 2015). Humor and self-identification are key factors in sharing memes on social profiles. Taecharungroj and Nueangjamnong (2015) found that the most shared memes on Facebook are those that are self-defeating. In our study, this can be demonstrated with meme N2. This image can be classified as self-defeating, and it received the highest average in the self-identification scale, and most participants (64.8%) answered that they would share it on their profiles. Because this meme was one of the funniest, most relatable, and considered to be shared, there could be a possible relation with these variables. Therefore, in the future, the relationship between humor, self-identification, and intent to share memes on social media could be studied. Our findings show that those with lower PWB may find self-defeating memes funnier and more relatable. Therefore, individuals that have various stressors in their lives and find it difficult to adapt to their environment, may utilize self-defeating humor to cope with their life's challenges.

Limitations

Just like any other study, my research has various limitations. Firstly, my sampling procedure was through availability and convenience. Therefore, my sample is not representative, especially considering that the majority of the participants were women and undergraduate students. Furthermore, in my one-way ANOVA there was not an equal distribution in the groups, which may affect the statistical significance and its validity. Additionally, variables that may be affected by meme-sharing were not taken into consideration, such as self-esteem, social depravations, productivity, among others. These results need to be carefully interpreted because compulsive social media use and meme-sharing could imply a lowering of PWB. Having these limitations in mind, the hypotheses of this study are consistent, but not definitive and do not imply causality.

Concluding Remarks

As memes and humorous content is shared on social media, many psycho-social interactions arise with it. Evidence suggests that there is a tendency of sharing memes to reduce psychological tensions in the means of a better psychological well-being. I also noticed that there are not only individual factors in meme sharing, but also collective factors in group formation and enhancing relationships with others. Hence, sharing content on social media profiles may be a canal to feel understood,

comprehended, and not feel alone. For future research, relationships may be examined between sociodemographic variables, such as age, and sense of humor. Additionally, future studies may examine the neurological mechanisms that underlie meme-sharing behaviors. In conclusion, meme-sharing, humor, and self-identification are key factors when dealing with the many challenges of our daily lives, both psychologically and socially.

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