

# Tweeting Autism

## *A Framing Analysis of Twitter Conversations on Autism in Indonesia*

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Abstract: This paper is intended to explore the way in which Indonesian Twitter users' frame autism. Recent studies show that the micro blogging platform has the ability for its users - either groups or individuals - to use frames to bring attention to specific issues. By mapping the conversations about autism on Twitter for a six month period (November 2017 - January 2018 and March - May 2018), the intended findings will be expected to give further insights into (1) what are the main issues in relation to autism discussed on Twitter; (2) how Twitter users' frame the issue of autism and (3) how autistic people are portrayed on Twitter. Using DiscoverText (a text and social data analytics software) and Twitter API search, tweets were generated using certain keywords related with autism in the Indonesian languages, including "autism," "autistic," "special needs" and "neurodiversity." The analysis stage was done by applying the traditional and progressive models of disability developed by Clogston (1994) as a framework to investigate the dominant frames in Twitter conversations about autism in Indonesia. The results indicate that the frame of understanding autism on Twitter is still dominated by traditional perspectives, which focus more on the disabled individual's differences from others in society. On the other hand, the minority voice from autistic people themselves also appears on Twitter, representing the progressive perspective in viewing autism as a part of human differences.

## 1 INTRODUCTION

The topic of autism is considered to be relatively new in Indonesia, both as a new phenomenon offline and as an online presence. With the public history of autism in this country only beginning in the late 1990s, there is still a limited amount of academic research about autism available in Indonesia (Tucker, 2013). Due to the lack of access to media and health information, a large percentage of Indonesians - mostly those who live in small cities and rural areas - still have little understanding of autism (or other disabilities) (Riany, Cuskelly, & Meredith, 2016). Autism, clinically known as Autism Spectrum Disorder (ASD), is a lifelong neurological (brain) condition which affects three areas in the early years of development, including language, socialization, and behavior (Blank and Kitta, 2015, Laurelut, 2016, Reilly, 2013).

In Indonesia, although there is still no exact data on the rate of autism prevalence, in 2009, the Ministry of Health stated that one in every 150 children in Indonesia is born with autism and that

the number of children diagnosed with the disorder is continuing to increase (Mardiyati, 2011). Evidently, between 1997-1999, parents of autistic children initiated efforts to bring autism into public awareness in Indonesia, especially in urban areas, thus making the subject more familiar to the public by inaugurating public discussion and providing group support and information through online group discussions via mailing lists (Tucker, 2013). Until now (up to the time, as this paper was written in 2018), the parents' movements have still been going strong, both offline and online (particularly through social media platforms such as Facebook and Twitter).

Interestingly, starting in 2005, the presence of autistic individuals in Indonesia has become more visible. One of them is Oscar Dompas, who published his autobiography - the first 'autie-biography' in Indonesia. In 2013, a famous Indonesian pianist and music composer, Ananda Sukarlan, described himself for the first time as being an Aspie and as having Tourette's syndrome, when he shared his experience of being a "different"

person through a video on YouTube. In the same year, an account on behalf of Pemuda Autisme (Autism Youth) emerged using Twitter and a blog to educate people about autism, to advocate on behalf of autistics, and to assist them in building a community. This resonates with some of the previous studies which point out that the use of the internet as a communication medium has become popular globally among autistic people, with many finding it a more comfortable medium in which to communicate, as it provides a more controllable situation (Penny and Standen, 2009, Burke et al., 2010).

Online communication platforms, such as blogs and social media, were also acknowledged for providing the opportunities to include information and individual viewpoint sharing (Hermida, 2010; Holton et. al, 2014). In contrast, in a study of the newspaper coverage of autism in the United States and the United Kingdom over a period of 15 years, it was found that two-thirds of the news coverage used stigmatizing cues, such as addressing labeling, psychiatric symptoms, social skill deficits and physical appearance (Holton et al., 2014). Consequently, mainstream media could create “a threatening space” for autism, as autism was heavily depicted in loss frames- focusing more on the negative outcomes (for example, facing a lack of resources and financial struggles related to covering family stories with autistic children) (Holton et al., 2014). That said, online media platforms can include more individual points of view when looking at autism, including from people who are related to autistic people or autistic people themselves. This is also in accordance with the objective of this study - to explore more into the individual point of view of autism and autistic people in Indonesia through the micro blogging platform of Twitter.

## 2 THEORETICAL FRAMEWORK

### 2.1 The Traditional and Progressive Models of Disability

The development of disability studies as an academic area of study emerged in the 1970s and gained more acknowledgment during the 1990s in Anglo-American traditions, particularly in countries such as Britain and the United States (Shakespeare, 1998). In the 1980s, the social model of disability was getting more acknowledgment, although the roots of this approach are dated earlier to the late 1940s and 1970s (Barnes in Shakespeare, 1998).

Whereas the medical model of disability views the experience of disability in the context of the medical implications that it is supposed to have, the social model of disability interprets disability as a construct imposed by contemporary social organizations or external powers (e.g., medical, legal and governmental systems) (Shakespeare, 1998; Reaume, 2014).

According to Barnes (1998), the social model of disability- which has been previously proposed in the works of British writers - differentiates between disability and impairment (Shakespeare, 1998; Ellis and Kent, 2011). The model sees the difference between impairment – which is defined as a practical restriction that concerns the biological - and disability, as a social disadvantage or restriction, which is a difference promoted by society without considering impairments (Reaume, 2014; Shakespeare, 1998).

In the area of news coverage on disability issues, Clogston (1994) states there to be two categories of disability coverage: (1) the traditional models which largely based on the medical model of disability, focusing on the disabled individual’s differences from others in society and (2) the progressive model which based on the social model, focusing more on how society deals with a population that includes those with various disabilities (Nelson, 1994). Clogston’s traditional models depict disabled people as a “group of poor, powerless unfortunates who depend on society for physical and economic assistance” (Nelson, 1994). Example words found in a news article that applied the traditional model include “people suffering from” or “confined to a wheelchair.” Some of the issues that these models portray could be in the form of medical treatment and institutionalization, government and private support programs, charity telethons and the victimization of disabled persons. A previous study on disability news coverage by Clogston in 1991 indicated a major amount (60% of newspaper coverage) of issues based on the traditional models (Nelson, 1994). The traditional model was categorized into three frames by Clogston (1994, p.47):

- *Medical Model*: This model emphasizes the individual’s physical disability as an illness. The individual is portrayed as dependent on health professionals for a cure or maintenance. Also included in this model are stories that focus on the physical aspects of an individual’s disability.
- *Supercrip Model*: This model is focused on the individuals because of the physical

characteristics of their disability, portrayed either as ‘superhuman’ or ‘amazing’ because they function ‘normally’ in spite of their disabilities.

- *Social Pathology or Economic Model:* Disabled people are portrayed as disadvantaged clients who look to the state or society for economic support, which is considered to be a gift and not a right. The individuals are portrayed as the passive recipients of government or private economic support.

On the other hand, the progressive models largely portray disabled people as more inclusive. For example, a disabled person is viewed as part of a minority group demanding equal rights and full participation in society (Nelson, 1994). From the same study by Clogston (1991) concerning US newspaper coverage, 40% of the coverage portrayed progressive issues, such as discrimination, access issues, integrated education, employment issues and portraying the disabled person as a consumer (Nelson, 1994). Moreover, Clogston classified the progressive perspective into two frames (p. 47, 1994):

- *Minority/Civil Rights Model:* disabled people are shown as a member of a minority group dealing with legitimate political grievances, who are usually involved in disability rights and political activities, actively demanding political change.
- *Cultural Pluralism Model:* The disabled person is considered to be a multifaceted individual whose disability is just one aspect of many. No undue attention is paid to the disability. The individual is portrayed as are others without disabilities.

Both of these models (the traditional and progressive) will be used for further analysis in this paper, in order to investigate further which frame is frequently used when discussing autism issues in Indonesia.

## 2.2 Media Framing on Autism

Framing, according to Entman, is “the process of culling a few elements of perceived reality and assembling a narrative that highlights connections among them to promote a particular interpretation” (Entman, 2007). Furthermore, framing in news content generally has four basic functions: to define problems, to identify causes, to convey a moral

judgment and to suggest remedies or improvements (Entman, 2004). Media frames can also be categorized as either generic or issue-specific frames (Ben, 2013). While the first one refers more to broad and structural themes such as “conflict, human interest, economic impact, responsibility and morality” (Semetko & Valkenburg, 2000 in Ben, 2013), the second category is more subjective (Ben, 2013). For example, in the first category, Muhammad and Yang’s (2017) findings point out that many US publications highlight the economical impact of autism, which supports or maintains the medical model by viewing autism through the consequences of the economical cost factor imposed on the family.

Some previous studies on media framing (newspaper and television) on autism in countries such as the US, the UK, Australia and China indicate some tendency for there to be biases when depicting autism. Both media in Western and Eastern countries tend to focus on children in their coverage, even though autism is a lifelong developmental disability (Dodd, 2005; Bie and Tang, 2014).

In health framing issues, there are two approaches that are commonly applied in the study of mental disability coverage. A study on stigmatization and autism news framing by Holton et al (2014) used the gain/loss frames to explore the health benefits or rewards and the risk of disadvantages. It also applied episodic/thematic frames in order to look at the responsibility related to the autism issue at the individual and societal level (Holton, Farrell & Fudge, 2014).

Pertaining to the autism issue, from previous studies by Davidson & Henderson (2010) and Gray (2002), stigma is still found largely in the conversations surrounding the issue (Tang & Bie, 2016). Furthermore, cultural factors play an important part in reflecting health-related stigmas in developing countries (Weiss et al., 2006; Muhamad and Yang, 2017). For example, in China, it was found that there are two factors which might contribute to heightening the public’s low awareness of autism and thus decreasing the discrimination against them (Tang & Bie, 2016). The first one is the scarcity of resources and facilities for autistic children in China, and the second one is “the cultural pressure to have a normal child” (Hua & Yang, 2013; McCabe, 2007; Tang & Bie, 2016). Prior to the study, there were no health education programs in China that intended to reduce the stigma of autism (Tang & Bie, 2016).

Among the various topics related to the autism issue in the media, the vaccine issue is considered to

be important when looking at the news coverage of the issue, as it caused great controversy after a publication in the British medical journal, *The Lancet*, “suggested a possible link between autism and the MMR vaccine” (McKeever, 2013; Kang-Yi et al., 2013). The public controversy brought great attention from the news media, such as in the US, where autism - according to the Pew Research Center, 2008 - was included as one of the top five disorders/diseases in health news coverage (McKeever, 2012). Celebrities are also regarded as having a prominent role in disseminating information about autism, whether as patients or as campaign supporters (Kang-Yi et al., 2013).

In news framing, there are two approaches to analyzing the content; inductive or deductive (Gamson, 1992 in Muhammad & Yang, 2017). The “inductive approach involves examining stories with an open view and allowing for frames to emerge” (Gamson, 1992), whereas a deductive approach involves analyzing the content with predefined frames to verify the presence or absence of certain frames” (Muhamad and Yang, 2017). The latter approach will be applied in this study, as the aim of this study is to explore more on how autism is portrayed in Indonesia from the perspectives of autistic and non-autistic people who use Twitter. The predefined frames used in this study were constructed from the studies above on news framing on autism, in order to create the categories regarding the age groups and type of issues that Twitter users were focusing on when talking about autism.

### 2.3 Framing on Twitter

Meraz and Papacharissi’s study on networked framing and gatekeeping on Twitter in 2011, focusing on the Egyptian uprisings case, showed that the Twitter platform has the ability for its users - either groups or individuals - to use frames to bring attention to specific issues (Moody-Ramirez & Cole, 2018). Twitter also has some advantages related to its use as a news and storytelling platform, as it creates an opportunity for “collaborative filtering and the curating of news” (Schonfield, 2010; Meraz & Papacharissi, 2013). The addressivity and conversational markers known as “retweet” (@RT), “hashtags,” replies or mentions on Twitter could be used to maintain interactivity and to build interpersonal conversations as well as social awareness streams, thus “giving a voice to marginalized issues and publics” (Meraz and Papacharissi, 2013).

Communication platforms such as blogs and social media are opening up spaces for information sharing and providing arenas where individual viewpoints can be shared (Hermida, 2013; Holton et al., 2014). Furthermore, Holton et.al (2014) suggested that the social media platform could provide an arena for discussing topics and issues beyond the mainstream voices and stigmas which largely found in the news media’s coverage. According to the same study, the journalist did not include autistic points of view in the news media. Consequently, to improve the news coverage of mental disabilities, news producers are suggested to take note of online media platforms for listening to other voices and acknowledging the audience’s expectations of the news (Holton et al., 2014). This leads to the significance of this paper - to explore more on how autism issues are discussed and how autistic people are portrayed by the audience’s (Twitter users) point of views.

Regarding the Indonesian context of social media use, it could be stated that Indonesian internet users have been dubbed as the Twitter’s early adopters and the most prolific Twitter users (Carley et al., 2016). Previously, Indonesia has been ranked as “the country with the highest level of Twitter penetration” in 2010 according to the ComScore report. It was the fifth country with the largest number of Twitter users in the world in 2012, with 29.4 million users (Semiocast, 2012; Carley et al., 2016). By 2013, Indonesia was acknowledged as the “Twitter nation” by CNN and ranked as the fifth most tweeting country a year later (Lim, 2013; Carley et al., 2016).

## 3 RESEARCH PROBLEMS

Prior to the data analysis, a codebook was constructed to be used as guidance or as a framework when analyzing the tweets used to answer the following questions:

- What are the main issues of autism discussed on Indonesian Twitter?
- How do Indonesian Twitter users’ frame the issues of autism?
- How are autistic people portrayed on Indonesian Twitter?

Each tweet collected will be coded and categorized into one of two categories: (1) the demographics (age group) of autistics and (2) the categories of autism issues as shown in Table 1. This

framework was developed from previous studies about news framing on autism (newspaper and television news framing) and also studies about online content analysis (health and social issues in social networking platforms). The analysis will investigate the dominant frames - using the traditional and progressive model developed by Clogston (1994) – in order to determine how autistic people are portrayed in online conversations, and to explore further what issues that people most talk about related to autism on Twitter.

Table 1: Content Analysis Item Descriptions

Categories	Sub-categories and Descriptions
Age group	Defined as the representations of autistic profiles (age group) in the tweets or content of the tweets (pictures, article/news) (adult, teen, children)
Issues framing	<p>Defined as what issues for the specific topic on autism presented in social media, including:</p> <ol style="list-style-type: none"> <li>1. Infrastructure;</li> <li>2. Medical related issues and science (i.e., scientific advancements in autism-related research and contents about autism risks, diagnosis, causes, and treatments);</li> <li>3. Charity;</li> <li>4. Personal or family story;</li> <li>5. Celebrity story;</li> <li>6. Social and legal case;</li> <li>7. Policy;</li> <li>8. Art and cultural activities (art, films, and fiction about autism or cultural/artistic/athletic achievements of autistic people);</li> <li>9. Politics or political commentary; and</li> <li>10. Misuse of the word “autism” (i.e., erroneous use of the term autism to refer to introverted personalities or unsocial behaviors).</li> </ol> <p>(Jones and Harwood, 2009, Bie and Tang, 2014, Tang and Bie, 2015, Kang, 2013)</p>

## 4 METHODS

For this stage of the data collection, certain keywords related to autism in the Indonesian language were used, including “autism,” “autistic,” and “neurodiversity”, in order to search for tweets in the period of the first three months (1st November 2017- 31st January 2018). The keywords “autism”

and “autistic” are common terms when talking about autism, while “neurodiversity” is a specific term which has been drawn out of the references and academic literature on the autism movement through the internet. Using DiscoverText, a text and social data analytics software that enables users to schedule messages from Twitter, and also by using a Twitter keyword search application programming interface (API), tweets were collected during the three months period. Tweets that were irrelevant (not related to autism issues or not in the Indonesian context) were omitted to obtain an appropriate and clean dataset for analysis. The filtering process was done manually to exclude tweets that do not relate to Indonesia (e.g. when using the keywords, the software will generate data from countries that use the same terms or that are in a similar language, such as the Dutch and Malaysian languages). At the end of the first period, the result was not significant regarding the amount - only 60 tweets related to autism in the Indonesian context.

Considering the results above, another search for the second period was conducted, during 1st March – 31st May 2018. This period was chosen regarding international Autism Awareness Month in April. Moreover, from further observations in March, there are many tweets appear containing different terms that address autism, namely “special needs.” This term was then added later on in the data collection process in the remaining months of the second period. This resulted in a larger amount of tweets (N = 2541) but the filtering process was done further in order to eliminate the content that did not relate to autism and duplicated items. The results can be seen in Table 2 after implementing the filtering and de-duplicating process in order to get a clean dataset.

## 5 FINDINGS AND DISCUSSIONS

### 5.1 Most Prominent Issues: Cultural, Charity, Medical and Infrastructure

As seen in Table 3, the most prominent main issues that frequently appear on Twitter are art and cultural, charity-related, medical, science-based and infrastructure. For each category, five tweets were selected (using the Top Meta Explorer feature in DiscoverText) based on the most retweeted and favorited count value, in order to be analyzed further.

Table 2: Frequency of Issues in Autism-related Tweets

No	Issues	Count	Percentage %
1	Art and cultural	95	19
2	Charity	82	16
3	Medical and science	76	15
4	Infrastructure	68	14
5	Social and legal cases	44	9
6	Political commentary	32	6
7	Personal/family story	31	6
8	Misusing the term	15	3
9	Celebrity	8	1.6
10	Policy	2	0.4

The first leading category is related to arts and cultural events held in Indonesia to celebrate Autism Awareness Month. As presented in Table 3, it could be identified that some descriptions of autistic people are as an individual who has special or outstanding talents and skills (indicated by using the words “amazing” and “extraordinary”) despite being valued as a person with deficit skills or impairments. On the contrary, the word “extraordinary” is also used in a different context – in order to praise the efforts of the community in providing space for autistic students to express themselves.

Tweets in this category also contain information about popular movies and television seasons that portray autistic characters such as *Atypical* (TV series), *The Good Doctor* (TV series) and *Please Stand By* (movie). This form of popular culture is seen of as a useful reference in order to understand autistic individuals as people who have a different way of thinking.

Table 3: Tweets on Art and Cultural Frame


No	Tweets
1	<i>How Creative Are the Children with Special Needs in Autism Awareness Festival</i> <a href="http://bit.ly/2JTznZZ">http://bit.ly/2JTznZZ</a> : Children with autism could have achievements. They prove it with performing in Autism Awareness Festival. (kumparan.com)
2	<i>FeMalicious, have you ever met with ABK (Children with Special Needs) that amazed you?</i> #JoyParenting #HappyMorning #IndyKinos
3	<i>This child has symptoms of Autism .. but he has extraordinary skill than typical kids.. the adzan (call to prayer in Islam -ed) that he recites sounded more melodious than the sound of other chants. May Allah SWT gives him health and ease in life. Do not be discouraged brother cc</i> @fahiraidris
4	<i>The way gffa (the name of an art gallery, -ed) and Spectrum gives photography lesson to ABK (special needs children) to give them some space</i>

	<i>to express themselves as who they are rather than forcing them to be what "normal people should be" is really extraordinary. Thanks for the inspiring exhibition!</i>
5	<i>"In my opinion, this TV series (Atypical) is great. We can understand how the perspective of this world from an autistic. How difficult it is for him to understand the world without being mocked at."</i>

The second prominent category, the charity frame, contains information related to charitable donations and community events in support of autistic individuals and organizations related to autism (Tang and Bie, 2015). This frame frequently appears on Twitter, and is still related to various events that are a part of Autism Awareness month celebration. In the tweets that fit in the charity frame, most of them depict the autistic person as individuals that need to be understood, along with the help that is to charity, as seen in the examples (see Table 4). This includes the tweet from the President of Indonesia Joko Widodo (Figure 1), as he made a statement on Twitter to commemorate Autism Awareness month: “*We need to care more about our brothers, sisters and our children who have autism. They possess unique personalities that we need to understand and care about. We support them to grow and to have great achievements. Happy Autism Awareness Day, April 2nd, 2018 – Jkw*”. This tweet received a large number of likes, retweets, and replies.

Table 4: Tweets on Charity Frame

No	Tweets
1	<i>Thank you for the participation of our friends #walk4autism and #grandindonesia who have facilitated our event, until we meet at the next event #walk4autism #walkforautism #walkforautismJKT</i>
2	<i>Autism is not a barrier for people with autism to work. Let's love, understand and empower women and girls with autism. Happy World Autism Awareness Day!</i>

3	<p><i>"The most interesting people you'll find are ones that don't fit into your average cardboard box. They'll make what they need; they'll make their own boxes," Dr. Temple Grandin</i>  <i>Happy World Autism Awareness Day</i>  <i>@univ_indonesia</i></p>
4	<p><i>Through this #walk4autism YAI invites the public to participate in this campaign so that they can see for themselves and realize that autistic individuals are part of us, who can be independent, have the ability &amp; can work together. #artartawalk #autismawareness</i></p>
5	<p><i>Nuha (Person with Autism)</i>  <i>Some Support World Autism Awareness Month, add a #Twibbon #walkforautism #walk4autism #autismawareness #autismawarenessmonth #walk4autism2018 #walkforautism2018 #jakartawalk #LightItUpBlue</i></p> 

Interestingly, looking from the sample above, we could see different attention and degree of understanding autism. Some messages are focusing on giving supports and opportunities for children, women, and girls with autism, while others see autism as people with a different way of thinking. For example, in a tweet to commemorate Autism Awareness Day posted by @AutismIndonesia (The Autism Foundation of Indonesia, or known as YAI), the non-profit organization posted a picture of a woman with autism, using the term “person with autism” instead of “special needs person.” However, a tweet from a private hospital (tweet no. 2 in Table 4) is showing a picture of a child with Down Syndrome as an illustration of its tweet supporting women and girls with autism. Another tweet from an account behalf of @makaraitv (a television station owned by University of Indonesia, the oldest state university in Indonesia) quoted Temple Grandin to emphasize that people with autism have a different way of thinking (tweet no. 3 in Table 4). This could be seen as a different degree in understanding on autism among Twitter users in Indonesia.

The third prominent category- the medical and science- largely includes tweet about assessment, intervention, therapies, remedies, and news related to research on science, technological support and medical inventions related to autism. The example tweets in this category emphasizes issues about symptoms, the prevalence of autistic person in Indonesia, and also certain traits which often seen as behavior problems.

Another interesting finding that appears in this category is a tweet that perceives autism as a disorder that needs to be cured (*"AUTISM IS CURABLE" Yes. Autism can be cured. That's not my word. That's Kak Kresno's word, fellows ... <http://fb.me/2ZzeiRL61>* ) The tweet was quoting a local psychiatrist -who once wrote a book titled “Autism is Curable”- (<https://www.amazon.com/Autism-Curable-Indonesian-Kresno-Mulyadi/dp/6020229319>) despite the fact that autism is “a lifelong disability of biological origin” (Dodd, 2005).

Infrastructure frame is the fourth most prominent issue being discussed on Twitter. Most of the tweets talk about the lack of health and education facilities for children and people with autism. The conversations in this category also attribute the responsibilities of providing the infrastructure to the government.

## 5.2 Twitter Users Frame of Autism

From the findings, it could be concluded that there are different views when it comes to understanding autism. Most of the tweets largely perceive autism as a neurological and developmental disorder that can be detected from an early age. The conversations around autism are also talking largely about treatments and offering problem-solving strategies such as interventions and therapy programs. This resonates with the previous study by Satvikadewi (2014) about the discourse on autism via Indonesian Twitter, which finds out that the knowledge about autism constructed on Twitter refers to autism as a disorder, disease or illness. This was indicated through a series of tweets using certain medical-related terms, such as “autistic sufferers,” “DSM V (Diagnostic and Statistical Manual)” “autism disease” etc - that represent the meaning that autism is a condition that shows the symptoms of an illness (Satvikadewi, 2014).

However, apart from the fact that autism is a developmental disorder which begins in childhood and that has a tendency to persist to adulthood (WHO, 2013), autism is still perceived by some

Twitter users as being a disease and illness that is to be cured and that should be prevented. Moreover, from the findings, it can be seen that there is another perspective when looking at autism - as a different condition, and as a unique way of thinking.

Another interesting finding is that Twitter users exert the religion aspect in relation to understanding autism. Some tweets cite and share stories and interviews from the Ulema (Muslim scholar or expert who is recognized as having specialist knowledge of Islamic sacred law and theology) about how to deal with autism and how to handle autistic children. Religion has turned out to be one of the frames used by Twitter users to understand the meaning of dealing with and having a family member with autism.

Moreover, having autistic children is viewed as both a test and a gift from God, as one of the tweets states: According to Mrs. Unun, children with special needs are a pious partner for parents. However, these special children are a gift from God Almighty. This resonates with the previous findings about parents of autistic children in Indonesia and also in the US (from a Muslim and South Asian background). These parents regard their children as gifts from Allah (means God in Islam) and feel blessed that God has chosen them to be special parents (Jegatheesan et al., 2010; Hersinta, 2012). In this case, religion acts as the primary frame that helps the parents to understand the meaning of having a child with autism (Hersinta, 2012; Jegatheesan et al., 2010).

### 5.3 The Portrayal of Autistic Person

From the majority of the tweets, it was found that children are largely represented (65%) while other age groups (adult and teen) only represented in smaller numbers as shown in the chart (Figure 2). The previous study on autism representations in British and Chinese newspapers also found similar evidence; portraying autism as a condition that primarily affects children (Huws and Jones, 2011; Tang and Bie, 2015). This over-representation of autistic children has also been presented in the US, where children's issues and stories were among the top issues in the television news coverage (Kang, 2013). This biased portrayal of autism could lead to the tendency to "discuss autism as a condition that only affects infants and children" (Tang and Bie, 2015).

In addition, the cloud explorer feature in DiscoverText was used to reveal the most popular keywords being tweeted, in order to search for the

most frequent terms that were used when addressing autism and people with autism. It was found that "special needs" and "special needs children" ("berkebutuhan khusus" and "anak berkebutuhan khusus" in Indonesian language) are the most frequent terms used when tweeting about autism-related issues and when addressing people/children with autism. Although the term "special needs" is considered to be a disability euphemism and not a legal term in US law (Gernsbacher et al., 2016), in Indonesia it can be found largely in the daily context to address people and children with disabilities, including autistic people and children. This might relate to the fact that the term "special needs" is still used in the government's legal documents, such as in the Circular Letter of Directorate General of Primary and Secondary Education, Year 2003 on inclusive education (2003).

Historically, the concept of disability in Indonesia is largely focused on a person with functional impairments. According to the Report on Persons with Disability in Indonesia (p.3; 2014), disabled people are labeled with the prefix 'ber-', 'which means 'has' or 'to own' disability (ies) ("berkebutuhan khusus" means having special needs), including when referring to a person or child with autism. However, since the enactment of Law No. 4 of 1997 on Persons with Disability (PWD) in Indonesia, the term PWD is considered to be a legal terminology (Adioetomo et al., 2014).

Moreover, autistic people are still largely described as a victim or as a victimized group, and they are also seen of as a part of a vulnerable group - discriminated and bullied against - in some tweets. As one tweet stated, "*Be patient, okay? His reply was horrifying. The majority of Indonesian people are still discriminative. People with autism and other neurodevelopmental disorders are also discriminated against. Bullying means discrimination against the weak. In this country for sure, people's thoughts should be in a mainstream way.*"

One particular case that gained special attention on Twitter happened during the 'Walk for Autism' in Jakarta. There was a political tension conflict related to the upcoming 2019 presidential election. In the event, a group of autistic people was reported as being 'victimized' and were mocked by another group (opposed to the current president). The autistic people were being scoffed at for carrying a poster quoting the President of Indonesia Joko Widodo (from his tweet about supporting autistic people) during the walk event (Wicaksono, 2018). This incident incited a large response from Twitter



users, particularly from the parents of autistic children and from groups from both opponents.

Other tweets also appear to include stereotyping and stigma when addressing autistic people. Being autistic is perceived as the person having bad behavior, possessing a weird attitude or being categorized as a mad person. One of the tweets stated: Have you ever had a friend like mine? He has a normal physical condition, but his brain is a bit, yeah... is he included in the special needs category? My classmates even looked down on him for stealing.” Another tweet that was shared was about a news article that stated: #infojabar Some Indonesians Still Consider People with Autism to be Similar to Mad People. However, this is not surprising, considering the fact that in Indonesia’s 2009 National Socioeconomic Survey, the listed category of disabilities were limited to sensory, physical and mental disabilities without properly representing the prevalence of disability in the mental, emotional and intellectual domains (particularly autism, ADHD, and other intellectual disabilities) (Irwanto et al., 2010).

Another portrayal of autistic people found in Twitter is related to the ‘supercrip’ model, referring to them as people who have extraordinary skills or who are ‘savants’ despite their disabilities. Savant Syndrome was popularized by the fictional character in the movie “Rain Man”, who had an outstanding cognitive skill that was above the population norm. This presented in some tweets, including the below tweet from a private hospital’s Twitter account: Autism Savant or Savant Syndrome: This type of child has an extraordinary level of intelligence. Let’s recognize the characteristics & interesting facts about Autistic Savants at <http://bit.ly/autis-savant>.

Another tweet quoted a statement from Risma, the Mayor of Surabaya city, when she opened up a new therapy centre for autistic children: During the Opening Ceremony, Risma Motivates Special Needs Children to be Like Einstein. The Mayor shared her expectation that autistic children could have extraordinary achievements like the famous scientist, Albert Einstein. These two findings are related to the previous study by Draaisma (2009), which found out that many fictional autistic characters are represented as savants with a special talent, although savantism is rare among autistic people (Draaisma, 2009).

On the contrary, there is also the portrayal of autistics people as a “typical” person who has unsocial behavior, as stated in one tweet: I saw a friend who behaved like an autistic and an idiotic person. Every day, my timeline is full of his

garbage. However, this kind of misuse of the word ‘autism’ and ‘autistic’ has been criticized largely by Twitter users, who share messages to the public as a part of an autism awareness campaign. Using the word autism as a joke and as negative labeling is wrong.

## 6 SUMMARY AND CONCLUSION

Based on the Clogston’s traditional and progressive models of disability, it can be concluded that all three traditional models - medical, supercrip and social pathology - are the dominant frame when looking at how autism and autistic people are portrayed on Twitter. The medical model is presented heavily in the medical and science frames by addressing issues related to symptoms, treatments, early detection and dependencies among the health professionals. The art and cultural frame puts an emphasis on describing autistic people as ‘supercrip’ by focusing on their extraordinary talents and amazing performance in art exhibitions and cultural shows, in spite of their autistic condition. The social pathology or economic model appears largely in tweets in the charity and infrastructure frames, which focus on the autistic person as an individual with special needs who constantly needs economic support from the government and from their families. This model is also presented strongly in the personal and family story frame by focusing on the struggling story of parents and other family members in dealing with autism and how they provide economic support for their children.

In this study, the autistic person is still viewed largely within the medical and economic model, including as an object of charity. It is worth noting the fact that Indonesia has ratified the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) on 30 March 2007 (Adioetomo et al., 2014). By ratifying the UNCRPD, it means that a person with disabilities, including autistics, should be viewed as “people who have a right to live in a society that does not erect barriers to their participation based on their functional status” (Adioetomo et al., 2014). Moreover, the ratification was strengthened through the enactment of Law No. 19 concerning the Ratification of the UNCRPD, which means that the new law reaffirmed that Indonesia is committed to respecting, protecting, and meeting the rights of PWDs (Adioetomo et al., 2014; p.3). By enacting the Law, the Indonesian government has already made a strong commitment to improving the well-being of

people with disabilities, by claiming equal rights and opportunities for PWDs—including and especially children with disabilities—in all aspects of life (Adioetomo et al., 2014; p.3). However, the enforcement of the Law still remains a challenge, as Indonesia still needs to develop reliable data on disability, as currently the existing data is still fragmented and mainly reflects social welfare conditions related to poverty (Adioetomo et al., 2014; Irwanto et al., 2010)

Secondly, the progressive model, although it was only presented in a small number of tweets, should be pointed out as representing the minority voice: the autistic people themselves. Previous studies of news framing on autism revealed that the mainstream media tends to sensationalize and stigmatize autism (Holton et al., 2014; Tang and Bie, 2015). The present study found that the news media still has a large influence on Twitter, as many of the tweets are in the form of news sharing. However, the minority group can utilize the micro blogging platform as an arena to provide a different discourse compared to that of the news media. Autistic people use Twitter to share stories and views from firsthand experience in the hope that this kind of voice could promote a fuller understanding of the concept of autism.

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