

# An Analysis of Public Trust and Confidence Shown towards the Royal Malaysian Police in the Social Media

\*\*Nur Atiqah Sia Abdullah \*\*Suziana Zamli

\*Faculty of Computer and Mathematical Sciences \*\*Faculty of Communication and Media Studies Universiti Teknologi MARA (UiTM), Malaysia 40450 Shah Alam, Malaysia

\*atiqah@tmsk.uitm.edu.my

#### Abstract

Public confidence is a concept that underpins the entire system of policing. The police force is constantly at risk of losing public confidence, due to a range of factors including falling levels of police visibility. Recent studies indicate increased interest in sentiment analysis research, especially in social media. Sentiment analysis research is a useful tool for analysing the public's perception of police misconduct as expressed in social media. Therefore, this study will be an attempt to improve the methods used by police organisations to improve public confidence in the police. The following were achieved in this study: a) an assessment of the issue of police as topic in social media postings; b) techniques to classify the dataset on the issue of police through sentiment analysis; c) application of a model 'Trust and confidence in the police' adapted from Jackson and Bradford's (2010) [1] and The Metropolitan Police Survey

ISSN 1675-1302

<sup>© 2014</sup> Centre for Media and Information Warfare Studies, Faculty of Communication and Media Studies, UiTM

(MPS) 'confidence in policing model' adapted from Metropolitan Police Survey (2013) [2] using the three key elements that will eventually be applied to the Royal Malaysian Police (RMP) to improve public confidence in the police. This research concludes with a discussion of the implications of the model and how it can be used as a strategic guide for improvement. The findings can serve as guidelines for the Royal Malaysian Police to improve the organisational system and increase the level of public confidence in the police force.

**Keywords:** Police Misconduct, Public Perception, Content Analysis, Public Trust and Confidence in Policing, Sentiment Analysis, RMP

#### **1.0 Introduction**

Public confidence is a concept that underpins the entire system of policing. If the public loses confidence in the police, their ability to maintain public order will be diminished, which could have potentially disastrous consequences on a national scale.

Unfortunately, police forces are constantly at risk of losing public confidence, due to a range of factors including falling levels of police visibility (Sindall & Sturgis, 2013) [3], dissatisfaction with the handling of public-police interactions (McCluskey, Mastrofski & Parks, 1999 [4], Sunshine & Tyler, 2003b [5], Skogan, 2006) [6] and the misapplication of police powers (Dunleavy & Hood, 1994) [7]. Because it is recognised in the context of public confidence that trust is easier to lose than to gain (Dowler, 2003) [8], a key challenge faced by police forces is to identify evidence-based, front line policing tactics that can maintain or improve public confidence, in order that these risks can be mitigated.

#### **Media and Public Perception**

The factors mentioned above can affect the attitude of the public towards the Royal Malaysian police (RMP) since the police have been accused of misusing their power. According to Dahlgren (1995) [9], Gerbner (1980) [10] and lyngar and Kinder (1987) [11], it is an undeniable fact that the media have an impact on public perception. Therefore, it is reasonable to expect public opinion about the police force to be swayed by media reports of police action. Due primarily to the reactive nature of police work, police as public institutions rely on media release information about the discharge of their duties.

According Eschholz (2002) [12] and Carlson (1985) [13], 'reality' shows, such as COPS "can increase viewer satisfaction with the police while this is not true for blacks" while Kaminski and Jefferis (1998) [14], Sigelman, Welch, Bledsoe & Combs (1997) [15], Tuch and Weitzer (1997) [16] and Weitzer [17] in studies of police misconduct found increased negative views of police behaviour during the incident increased immediately after the news through violence. On the negative side, some researchers have found that media coverage of incidents of police misconduct affect the attitude of the police.

The Royal Malaysian Police (RMP) should continue to strengthen their efforts, with greater emphasis and focus on driving out malpractice in the police force. With full commitment and government support of the integrity among all police officers, the police can be on the right track towards acting as a clean, transparent, fair and credible agency of law enforcement to the people.

## 2.0 Review of Literature

#### 2.1 Social media

Social Media refers to interaction among people which may create, share and exchange information or ideas in virtual communities and networks. Social Media technologies take on many different forms including magazines, Internet forums, weblogs, social blogs, social networking, wikis, photographs or pictures, podcast rating and social bookmarking and video. According to Kaplan and Haenlein (2010) [18], there are six different types of social media, which are collaborative projects (e.g: Wikipedia), content communities (e.g: Youtube and Daily Motion), social networking sites (e.g: *Facebook* and *Myspace*), blogs and microblogs (e.g: *Twitter*), virtual social worlds (e.g: Second Life) and virtual game worlds (e.g: World of Warcraft). New media refers to various technologies that have emerged and seen rapid growth on a global scale during the latter part of the 20th century and into the new millennium. Everyone who has an Internet connection is already aware of some of the major types of this media, which include social networking sites. As new media is constantly evolving to connect to as many different platforms and people as possible, one of its most defining characteristics is interactivity. Social media is a broad term that encompasses several types of new media and communication practices. It is difficult to create an exhaustive list of the many forms social media takes. Social media is itself continually evolving, and developing an exhaustive list of all types of social media is like hitting a moving target. Some of the more common forms of social media include: Weblogs (typically shortened to 'blogs'), microblogs, social networks, wikis and media sharing sites (Pascu, Osimo, Ulbrich, Turlea & Bulgelman, 2007) [19].

Social media can be different from traditional media in many aspects which are quality, frequency, usability, immediacy or permanence in order to spread information among people. According to the Inspector-General of Police Secretariat (Corporate Communications) Deputy Head, ACP Ramli Mohamed Yoosuf, in order to provide the latest information immediately to the public, social media such as *Facebook* and *Twitter* will play an important role thus changing the landscape of presenting information to the people, which in turn may affect the public's perception towards the police force.

## 2.2 Content Analysis

Content analysis is a technique for systematically describing written, spoken or visual communication. It provides a quantitative (numerical) description. Many content analyses involve media – print (newspaper, magazines), television, video, movies, the Internet. Any medium that can be recorded and reviewed is appropriate. Content analysis is also used to analyze new material recorded by the researchers and to classify open-ended responses to interview or survey questions (Stambor, 2005) [20]. Content analysis is a research technique for the objective, quantitative description of the method and content of a clear communication (Berelson, 1952) [21]. It

also refers to any procedure to evaluate relative to a reference set, attitude or theme permeating a given message or document (Stone, Dunphy, Smith & Ogilvie, 1966). [22].

Objectivity is achieved by having a class's characteristics defined in such a way that different individuals can apply them to the same material and reach the same results. If the content analysis is subjective and not objective, each person will have their own content analysis and their own results. Being objective means that the results depend on the method and not the analyst.

- (a) Systematic means first, a set of procedures used in the same way for all the content that is being analysed. Second, it means that the category is established so that all relevant content is analysed. Finally, it means that the analysis is designed to obtain data relevant to the research question or hypothesis.
- (b) Quantitative recording refers to the numerical values or the frequency with which various types of content defined occur.
- (c) Manifest content means that the content is clear, which means that the content must be coded as it appears, not as content analysts feel it is intended.

## 2.3 Sentiment Analysis

Sentiment analysis and opinion mining is the field of study that analyses peoples' opinion, sentiments, evaluations, attitudes and emotion from written language. Sentiment analysis refers to the use of natural language processing, text analysis and computational linguistics to identify and extract subjective information in source materials. It is one of the most active research areas in natural language processing (NLP) and is also widely studied in data mining, web mining and text mining. Generally speaking, sentiment analysis aims to determine the attitude of a speaker or a writer with respect to some topic or the overall contextual polarity of text. In other words, it determines whether a piece of writing is positive, negative or neutral. The attitude may be his or her judgment for evaluation (see appraisal theory), affective state (that is to say, the emotional state of the author when writing). It is the process used to determine the attitude, opinion and emotion expressed by a person about a particular topic in an online mention. An online mention is any content built substance discovered online social media platform such as networking stage, for example, *Twitter*; websites, news articles and the numerous discussions individuals use for discussion. Most sentiment analysis tools tend to classify these mentions into positive, negative or neutral mentions. For example, if someone writes a Facebook comment that reads: I love the summer in New York, but I hate the winter'. The individual scores would show 'love the summer' as positive and; hate the winter' as negative.

#### 2.3.1 Sentiment Classification

Sentiment classification (SC) determines a positive, negative or neutral sentiment based on its general assessment towards the content. The content can be information that related to an element, individual, item or subject. Sentiment classification (SC) is utilised to segregate positive and negative review about the entities (Pang & Lee, 2008 [23]; Liu, 2012) [24]. In sentiment classification, the popularity for the entity can be identified through positive or negative sentiment. The best characterisation execution for notion examination (Pang & Lee 2008 [23], Dave, Lawrence & Pennock, 2003) [25] includes Naïve Bayes and maximum entropy classification techniques (Pang & Lee, 2008) [23].

## 2.3.1.1 Typical Sentiment Analysis Model

The information readiness step performs vital information pre-processing and cleaning on the dataset for the subsequent analysis. Some ordinarily utilised pre-processing steps include removing non-text based substance and Mark-up labels (for HTML pages) and removing data that are not needed for sentiment analysis, for example, review dates and reviewers' names. The survey dissection step analyses the linguistic features of review so that interesting data, including assumptions and item peculiarities, might be defined. Two tasks are usually combined for review analysis, which are POS tagging and negation tagging. After this stage, sentiment classification order is performed to obtain the result.

# 2.4 Police Disciplinary Cases

Figure 1 shows secondary statistical data obtained from the Royal Malaysia Police (RMP) police headquarters. The data indicates disciplinary cases for 2012 and 2013, which involves multiple offenses committed by police officers. The highest number of cases for these two years is police misconduct. Other disciplinary cases involve offenses such as crimes by police, corruption, *Sharia* cases, drug offenses, commercial cases, and absence from duty, inefficiency and others. From the statistics, there appears to be a need to investigate police misconduct to determine the root cause for this disciplinary case.

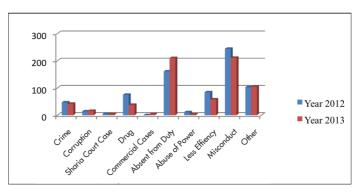


Figure 1. Secondary data police disciplinary cases

# 2.5 Similar Study on Public Confidence in Police

The following figures show similar study done on public confidence in police

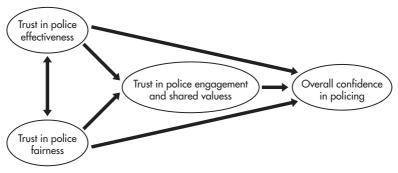


Figure 2. Trust and Confidence in the Police [1]

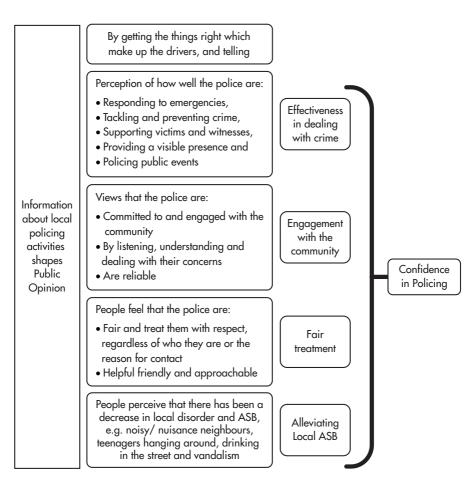


Figure 3. The Metropolitan Police Survey (MPS) Confidence Model in [2].

# 3. Research Questions

Based on the review of the literature, the researchers formulated the following research questions:

RQ1: What are the factors influencing public confidence in the police?

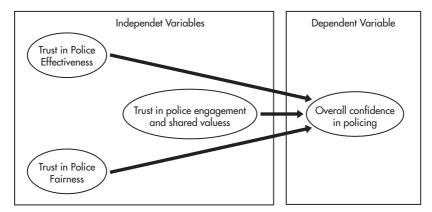
RQ2: How can the data be collected and analysed?

RQ3: How can confidence in policing be evaluated using social media data?

# 4. Methodology

# 4.1. Adapted Model for Confidence Policing

Figure 4 shows the adapted model in which confidence in police effectiveness and fairness anticipates confidence in police engagement. Overall confidence in policing is predicted by three aspects of trust, namely "Trust in Police Effectiveness", "Trust in Police Fairness" and "Trust in Police Engagement and Shared Values", which have been adopted as the basis of this research. These three trusts are important for categorisation of the issues in social media postings. The trusts are then used to determine overall confidence in policing. This overall purpose of this research is to determine whether it is possible for this model to be applied to the Royal Malaysian Police (RMP).



*Figure 4*. Adapted from Jackson & Bradford's Model (2010) [1] and Metropolitan Police Survey (2013) [2]

Table 1 shows the variables of the adapted model, which are three trusts and the mapping with perception or public opinion.

# TABLE 1

Variables and Perception Mapping

Variables and Perception Mapping				
Variables	Perception/View/Public Opinion			
Trust in Police Effectiveness (Effectiveness in dealing with crime)	<ul> <li>Responding to emergencies,</li> <li>Tackling and preventing crime,</li> <li>Supporting victims and witnesses,</li> <li>Providing a visible presence and</li> <li>Policing public events</li> </ul>			
Trust in Police Engagement and shared values (Engagement with the community)	<ul> <li>Committed to and engaged with the community</li> <li>By listening, understanding and dealing with their concerns</li> <li>Reliable</li> </ul>			
Trust in Police Fairness (Fair Treatment)	<ul> <li>Fair and treat them with respect, regardless of who they are or the reason for contact</li> <li>Helpful, friendly and approachable</li> </ul>			

In order to show the applicability of the model to RMP, a dataset which consists of social media postings was extracted from a social media monitoring tool. Keywords such as 'Police', 'Polis' or 'PDRM' were used to track all the possible mentions in social media from 5th to 10th of May 2014. A total of 132 postings were successfully extracted. These posting were then analysed to identify police issues. The postings were classified into three categories, which are Police Effectiveness, Police Fairness and Police Engagement, based on the adapted model. The dataset was then analysed for sentiments to identify positive, negative or neutral issues related to trust in police. In order to carry out the analysis and concepts based on the adapted model, a research framework was used to facilitate the process.

## 4.2 Preliminary Study

The preliminary study consisted of a background study about social media, police misconduct and public confidence in police models. Social media definitions, platforms, popularity and usages were studied. With the research emphasis on police misconduct, this aspect was explored through definitions, secondary data for police misconduct, problems, reasons and characteristics of police misconduct. The background study provided justification for this research, by identifying that police misconduct is one of the main issues faced by the Royal Malaysian Police (RMP).

In order to find possible solution, models that relate to public confidence in police were studied. These models included Jackson and Bradford's (2010) [1] structured model; [26] were also analyzed to find suitable elements to apply to this study. Jackson and Bradford's (2010) structure model of confidence in policing was adapted in this research. Based on the model, three categories of influencing factors were identified. These included police effectiveness, police fairness, and police engagement and shared values as the main factors that contribute to overall confidence in policing.

# 4.3 Data Pre-processing.

Data pre-processing (as shown in Figure 5) consists of steps taken to collect, clean and choose the data which matched the categories proposed in the adapted model of Jackson and Bradford's (2010) [1] Model.

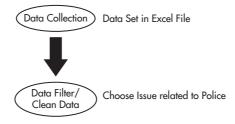


Figure 5. Data Pre-processing

#### 4.3.1. Data Collection

The data collection was carried out using social media monitoring tools. The social media monitoring tools are used in this research. The social media tracked included *Facebook, Twitter*; Blogs, *Google+*, Image/Video and others. The keywords 'polis', 'police' and 'PDRM' were used to track social media postings from the 5th to the 10th of May 2014. The data were then extracted in an Excel file for analysis. The raw data (Excel file) consisted of metadata such as date, URL, description of posting, type of media, sentiment analysis and influence. However, the focus for this research is on the description of posting. The collected raw data included 132 postings.

#### 4.3.2. Data Filter/Clean data

Data cleansing or data cleaning is the process of detecting and correcting or removing corrupt or inaccurate records from a dataset, table or database. Used mainly in databases, the term refers to identifying incomplete, incorrect, inaccurate, irrelevant part of data and then replacing, modifying or deleting this raw data or coarse data. After cleansing, a dataset will be consistent with other similar data sets in the systems. The inconsistencies detected or removed may have been originally caused by user entry errors, by corruption in transmission or storage or by different data dictionary definitions of similar entities in different store. Data cleansing differs from data validation in that validation almost invariably means data is rejected from the system at entry and is performed at entry time, rather than on batches of data. Some data cleansing solution will clean data by cross checking with a validated data set. Also data enhancement, where data is made more completely by adding related information, is a common data cleansing practice. When multiple data sources need to be integrated, e.g., in data warehouses, federated database systems or global web-based information systems, the need for data cleaning increases significantly. This is because the sources often contain redundant data in different representations (Rahm & Do, 2000) [27].

In this research, from the description of postings, the Excel file contained some irrelevant issue to the police and research focus. In this research, the most important issues are those related to police. Therefore, it is important to conduct a data clean or filtering to obtain all the related postings. Firstly, all the postings in the raw data were read to filter the data that has no relevance to police issues. A second, more thorough check was performed to filter those postings that contain non-applicable police issues. Thirdly, all the redundant and non-applicable postings were removed. At the end of this stage, the data sets were clean and only contained postings about police issues. A total of 101 postings made up the cleaned data for analysis. The clean dataset should contain only title, URL, date, description, and media type.

#### 4.4 Data Analysis

## 4.4.1. Clean Dataset

The clean dataset was processed in the text analysis stage, in which texts from related articles were read and examined. In this stage, all texts went through an initial reading process and interpreted judgments were made based on the scope of factors that influence police confidence.

#### 4.4.2. Sentiment Analysis

The sentiment in this research is different from the sentiment that is produced by social media monitoring tools, which apply only to English. Therefore, the sentiments are based on positive and negative adjectives in English. For the postings in Malay or Manglish, the social monitoring tools are not able to assess them correctly. Therefore, sentiment analysis is really crucial in this research to re-define the sentiments in the postings.

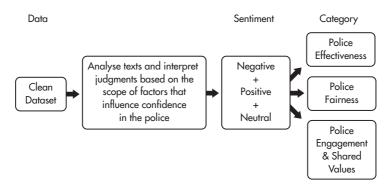


Figure 6. Data Analysis Process

In this stage, the clean dataset were classified into three major sentiments; positive, negative or neutral for the police issues. The description of each posting was read and analysed for its sentiment. Basically, whenever the posting mentioned a 'feel good story' about police, it was classified as positive. If the posting expressed disappointment or a pessimistic perception about police, it was classified as negative. If the posting did not show any bias to either sentiment, it was classified as neutral.

Figure 7 shows an example of a post that has a positive sentiment. In this example, the post expresses pride, and praises the police for ensuring the national security of the country. Words such as "tahniah", "terhutang budi", "mengorbankan diri", and "mempertahankan keamanan Negara" clearly shows the positive and "feel good" attitude towards the police. This example is a typical of the public's positive view of the police.

Figure 8 shows an example of a post that expresses negative sentiment. In this example, the posting shows frustration with the police. The wording is quite sarcastic by contrasting the police slogan with their actions. It represents an example of the public's negative view of the police.

> Tahniah PDRM kami sbg rakyat Sarawak warga Malaysia amat terhutang budi dan x dapat nak balas jasa wira polis yang sanggup mengorbankan diri dan masa demi mempertahankan keamanan negara....moga Allah jua membalas jasa ko org....

> > Figure 7. Example of a positive post

Tak sepatutnya PDRM bertindak sedemikian. Adakah ini melambangkan PDRM yang sebenar? Slogan PDRM TEGAS, ADIL DAN BERHEMAH.

Figure 8. Example of a negative post

got 2 saman, pls pm for detail, thanks

Figure 9. Example of a neutral post

Figure 9 shows an example of a neutral post. In this example, the sentence mentioned about summons and does not show any impression or emotion (either happy or disappointed) against the police.

# 4.5 Categorisation3

After finishing with the sentiments, the data go through another process, which is categorisation. In this stage, the data is clustered into three categories according to the adapted model in predicting overall confidence in the police. From the model, the three categories are police effectiveness, police fairness, and police engagement and shared values.

Evaluations of the performance of the police strengthen the incentives for police and measure the effectiveness of the police. Dissatisfaction with police effectiveness (both in cutting crime and in engaging with the local community) was associated with (a) not identifying with the police, (b) feeling that the police do not treat people with fairness and dignity and (c) judging there to be problems of social cohesion and trust in the community. It also means the ability of the police to fulfil its central remit (effectiveness not just in combating crime but also in providing a visible presence, policing public events and responding to emergencies). In this research, the keywords for effectiveness are identified (as shown in Figure 10).

Police Effectiveness			
Keywords in English:			
act quickly, prevent crime, assist victims, police			
presence, policing public events			
Keywords in Malay:			
Bertindak cepat, mencegah jenayah, membantu mangsa,			
kehadiran polis, mengawal acara awam			

*Figure 10.* The sample of categorisation based on the identified keywords for Police Effectiveness.

Next, keywords classified for fairness are identified (as shown in Figure 11). Police Fairness relates to whether police abuse their power or show favoritism and the way in which officers treat people (fair treatment) in terms of fairness and respect and whether they are helpful, friendly and approachable.

Finally, the keywords for Police Engagement and Shared Values are identified (as shown in Figure 10). Police Engagement and Shared Value means the extent to which police listen, understand, deal with public concerns and respond to the community; it is an indication of whether the police are committed to and engaged with the community. The police show a high level of reliability to gain the public trust.

Police Fairness		
Keywords in English: fair, treat with respect, helpful, friendly, approachable		
Keywords in Malay: adil, layanan mesra, membantu, mesra, senang didekati		

Figure 11. The sample of categorisation based on the identified keywords for Police Fairness.

Police Engagement and Shared Values			
Keywords in English:			
Engage with the community, listening, understanding community and			
are reliable			
Keywords in Malay:			
Berhubung dengan komuniti, mendengar, memahami, boleh diharap.			

*Figure 12.* The sample of categorisation based on the identified keywords for Police Engagement and Shared Values.

# 4.6 Data Interpretation

In the data interpretation stage, the graphs are interpreted together with the adapted model. The correlation of the model is used to interpret the analyzed data. It is important to co-relate these graphs with the model to show the significance level of the people's trust towards RMP.

From the adapted Jackson and Bradford Model, the dependent variable is Overall Confidence in Policing, while the independent variables are Trust in Police Effectiveness, Trust in Police Fairness, and Trust in Police Engagement and Shared Values, as shown in Figure 13.

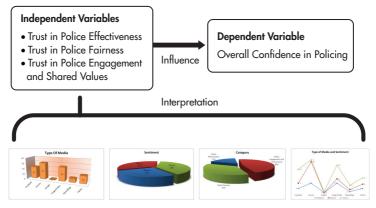


Figure 13. Data Interpretation Workflow

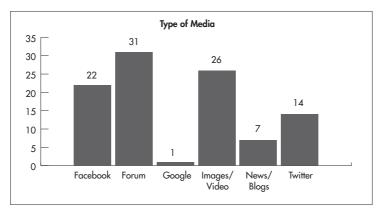


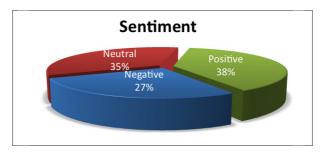
Figure 14. Media Types

## 5. Findings

This section discusses the trend for police issues that have been tracked across the social media issues such as Facebook, Forums, Twitter, Blog, Google+ and Image/Video. After cleaning and filtering the raw data of 132 postings, there were only 101 postings which were closely related to police issues. The breakdowns are illustrated using the following graphs.

## 5.1 Media Types for police issues

Figure 14 shows the most popular media (for the tracking period) is Forums (30.7%). From the monitoring tool, the forums discussing police issues are Lowyat (http://www.forum.lowyat.et), Sammyboy (http://www.sammyboy. com) and Carigold (http://www.carigold.com). Among three forums, the most active forum is Lowyat. The forums mostly discussed summons and other negative matters about the police. The second common media is Images/Video (25.7%), followed by *Facebook* (21.8%) and *Twitter* (13.8%).



#### Figure 15. Sentiment

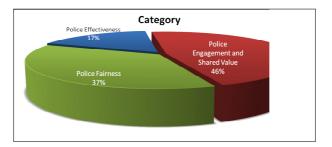


Figure 16. Categories of Police Issues

#### 5.2 Sentiment Analysis for Police Issues

The largest group of postings were positive, which are 39 postings (38%). These were followed by 35 neutral postings (35%) and 28 negative postings (27%). As mentioned in the previous chapter, the description of each posting is read and analysed for its sentiment. All the positive sentiments referred to postings which mentioned a 'feel good story' about police. Negative sentiment was assigned to postings that expressed disappointment or a pessimistic perception about police. Postings were coded as having neutral sentiment if they did not express either positive or negative sentiment.

# 5.3 Categories of Police Issues

Figure 16 shows the percentage recorded for each category related to police issues. The categories are Police Effectiveness, Police Fairness, and Police Engagement and Shared Values, which are adapted from Bradford and Jackson model [1]. The highest percentage was for Police Engagement and Shared Value with 46%, 37% for Police Fairness and lastly 17% for Police Effectiveness. This result shows most postings were related to Police Engagement and Shared Values. Therefore, it can be concluded that RMP is engaged with the community through social media regardless whether the postings were negative or positive.

#### 5.4 Type of Media and Sentiment

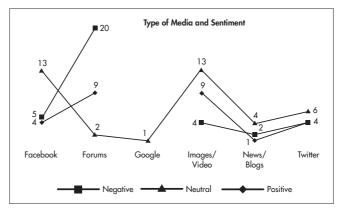


Figure 17. Type of Media and Sentiment

Figure 17 shows types of media and the sentiments associated with each of them. As mentioned, the most active media was Forums. In the Forums (Lowyat, Sammyboy and Carigold), most postings were neutral (19.8%). Most of them are asking the police about summons information. Negative sentiments in Forums mainly expressed anger because of getting summons. For both Facebook and Images/Video, there are positive sentiments (12.9%) recorded. Facebook users praised police for their appearance, effectiveness of operations and helpfulness. However, for Images/video, negative sentiments are stated because of images of purported police misconduct when the Malaysian Police were dealing with street violence in areas near the Jamek Mosque and Sogo department store in Kuala Lumpur.

# 5.5 Category and Sentiment Analysis

Figure 18 shows the comparison between different of categories (police effectiveness, police fairness and police engagement and shared values) with sentiment analysis.

Police Engagement and Shared Value is the category that received the most attention in social media. Figure 16 shows the positive sentiment in this category, which is 26 posting (25.7%). From the analysed data, the police showed the commitment to engage with the community, listening, understanding and dealing with their concerns and are considered as reliable.

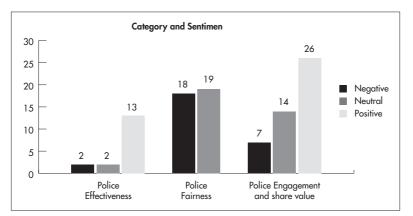


Figure 18. Category and Sentiment

For Police Effectiveness, the analysed data shows positive sentiments (12.9%). The social media users commented on the police's action dealing with emergencies, tackling and preventing crime, and police involvement in public events. However, for Police Fairness, the result consists of negative and neutral sentiments. This is because most of the social media users felt the police treated them unfairly to by issuing a summons. They were dissatisfied about the way police issued summonses. Besides, users claimed the police were not helpful, friendly and approachable when dealing with offenses and summonses.

#### 5.6 Category and Media Type

Figure 19 shows the statistical comparison between types of media and categories of police issues discussed in *Facebook*, Forums, Google, Images/Video, News/Blogs and *Twitter*. As mentioned, Forums were the most active platform that talked about police issues. Figure 19 shows the extent to which each of these issues was discussed on different types of media. Figure 19 shows that the highest number of posts occurred in the forums in the Police Fairness category, with 21 postings (20.8%). The postings mainly discussed summons and mostly conveyed a negative sentiment. Police Fairness was also discussed in *Facebook* (5.9%), Images/Video (14.9%), and *Twitter* (0.9%).

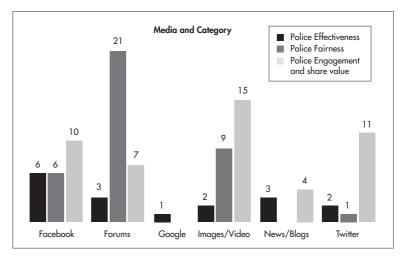


Figure 19. Category and Media Type

For Police Engagement and Shared Values, the most active media used was Images/Video with 15 postings (14.9%), followed by *Twitter* (10.9%), *Facebook* (9.9%), Forums (6.9%) and News/Blogs (4%).

For Police Effectiveness, the dominant media was *Facebook* with 6 postings (5.9%), followed by Forums and News/Blogs (each with 2.9%), Images/Video and Twitter (each with 2%) and Google (0.9%).

## 5.7 Correlation of Social Media Trend with Confidence in Policing Model

From Jackson and Bradford's Model (2010) [1], overall confidence and trust in police fairness and engagement with the community are highly correlated. Trust in Police Effectiveness and Fairness is tested to predict trust in Police Engagement; then overall confidence in policing is predicted by three aspects of trust, which are Police Effectiveness, Trust in Police Fairness, and Trust in Police Engagement and Shared Values.

In this research, Jackson and Bradford's Model (2010) [1] was adapted to examine overall confidence in policing by the RMP. The dependent variable is Overall Confidence in Policing, while the independent variables are Trust in Police Effectiveness, Trust in Police Fairness, and Trust in Police Engagement and Shared Values. Higher levels of trust in Police Effectiveness, Fairness, and Engagement will strongly influence Overall Confidence in Policing (as shown in Figure 20).

Social media data are classified into the three categories according to the adapted model. The data were collected and analysed in order to draw a conclusion about overall confidence in policing by the RMP. Sentiment analysis was used to refine public opinion towards RMP as expressed through social media.

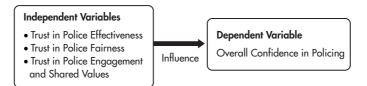


Figure 20. Independent and Dependent variables

# 5.8 Confidence in Policing Using Social Media Trends

From the analysis of social media trends and data, it can be seen that public ideas about the police do not constitute a single homogeneous mass. The analysed data show that Police Engagement and Shared Values accounted for 46% of posts, while Police Fairness accounted for 37% and Police Effectiveness for 17%.

Trust in police is then viewed as positive sentiment in the social media. More refined analysis shows that the positive sentiment is relatively high towards RMP in Police Effectiveness and Police Engagement and Shared Value. Table 2 shows the refinement data for the three trusts and the frequencies of sentiments assessed for each of them.

From the model, overall confidence is closely related to active assessments of police behaviour that relates to personal treatment (fairness), and effectiveness and engagement with the community. Trust in police becomes a moral connection between citizens. Figure 21 shows the percentage of the three aspects towards overall confidence in policing.

## TABLE 2

Trusts with Sentiments

Trusts	Positive	Neutral	Negative	Total
Police Effectiveness	13	2	2	17
Police Fairness	-	19	18	37
Police Engagement and shared value	26	14	7	47

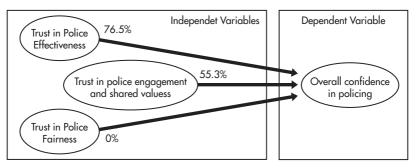


Figure 21. Percentages of Trusts

Based on the analysed data and percentages of trusts, the trust in Police Effectiveness is quite high among the social media users, amounting to 76.5% based on the positive sentiment of its category. The trust in Police Effectiveness shows the confidence in policing is high when the police force is dealing with crimes, emergencies and public events.

The trust in Police Engagement and Shared Values is average. Only 55.3% of social media users expressed positive sentiment about the police engagement with the community and their concerns. The trust in Police Engagement and Shared Values shows the average confidence in policing for RMP. RMP seems to be engaged with the community in social media; however the engagement must be expanded to gain more confidence from the public.

The trust in Police Fairness is zero. Social media users expressed neutral and negative sentiments towards the RMP for this category. This shows that the public distrust police fairness and it is can be concluded that the public lacks confidence in policing from the aspect of fairness.

As a conclusion, social media trends show that the overall confidence in policing is only from the aspect of Police Effectiveness and Police Engagement. The social media analysis clearly shows that a lack of confidence in policing in terms of Police Fairness.

#### 6. Discussion

In general, social media influences public perceptions. The results of this research show that trust in police effectiveness is higher than trust in police engagement and shared values. It shows the efficiency of the police in carrying out their duties. Nevertheless trust in police engagement and shared values should be increased, since external community relations with the police are very important. The lack of trust is in police fairness. It shows the lack of trust towards the perceived justice of the police organization based on community's point of view.

Data collected using social media monitoring tool also showed elements to tarnish the image of the police force. In such a situation, persuasion is very important in increasing public confidence by persuading or drawing their attention to trust the police. This action would improve the image of the police as well as enhance public confidence in the police, and this is where the element should be used in warfare. Persuasion is a symbolic process in which communicators try to convince other people to change their attitudes or behaviour about issues by sending messages in an atmosphere of free choice. Social media can play an important role in which police-related issues in the mass media should be censored. Social media should post something feel good about the police; for example, display positive images such as police officers having to work in the heat and the rain for the safety of the people. The role of social media is importance in displaying police videos in helping the public and showing a police presence everywhere on YouTube. The police also need to work to ensure the 'police with citizens' relationship becomes closer.

In terms of justice, the police cannot be partial or biased in carrying out their duties. Police should be equally fair to everyone, regardless of their background and not give preferential treatment to influential or very important persons (VVIP).

#### 7. Conclusion

From the model, overall confidence is very closely related to active assessments of police behaviour that relates to personal treatments (fairness), effectiveness and engagement with the community. The dataset from social media is categorised into three categories according to the adapted model. The result can be applied to assess the overall confidence in the policing carried out by RMP. The model was applied to RMP, and it was found that trust in police effectiveness in dealing with crime, as well as perceptions of how well the police respond to emergencies, tackle and prevent crime, police public events, provide a visible presence and support victims was relatively high, while trust in police fairness was zero. Social media users expressed neutral and negative sentiments towards RMP in this aspect of trust. It shows that the public distrust police fairness and it is can be concluded that there is limited public confidence in policing from the aspect of fairness. The results of this study can be absorbed into the police force to enhance public confidence in the police. These findings may help the police force to improve its organisation. The public perception of the police is related to their perception of the police performance in combating crime, curbing corruption and brutality. If the public perception of the police is improved, then the public and the police could become better partners in combating crime.

#### References

- J. Jackson & Bradford, B. (2010). Crime, policing and social order: on the expressive nature of public confidence in policing. *British Journal* of Sociology, 60 (3) pp. 493-521. ISSN 0007-1315.
- [2] Metropolitan Police Journal (Nov. 2013), *Survey in the MPS, Londoners View Count*
- [3] K. Sindall & Sturgis, P. (2013). Austerity policing: Is visibility more important than absolute numbers in determining public confidence in the police? *European Journal of Criminology*, 10(2), 137-153.
- [4] McCluskey, John D., Stephen D. Mastrofski, and Roger B. Parks. (1999). To acquiesce or rebel: Predicting citizen compliance with police requests. *Police Quarterly* 2:389-416.
- J. Sunshine & Tyler, T. (2003). The Role of Procedural Justice and Legitimacy in Public Support for Policing, *Law and Society Review*, 37: pp. 513–48.
- [6] W.G. Skogan. (2006), Asymmetry in the impact of encounters with the police, *Policing and Society*, 16/2: pp. 99-126.
- [7] C. Dunleavy, P. J., and Hood. (1994). From Old Public Administration to New Public Management, *Public Money and Management*, 14, 3, pp. 9-16.
- [8] K. Dowler. (2003). Media Consumption and Public Attitudes toward Crime and Justice: The Relationship between Fear of Crime, Punitive Attitudes, and Perceived Police Effectiveness. Journal of Criminal Justice and Popular Culture, 10(2): 109-126.

- [9] P. Dahlgren. (1995). Television and the Public Sphere. *SAGE Publications London*.
- [10] D. Graber. (1980). Crime News and the Public. New York: Praeger.
- [11] S. Iyengar & Kinder, D. R. (1987). News That Matters: Television and American Opinion. Chicago: University of Chicago Press.
- [12] S. Eschholz. (2002). Racial composition of television offenders and viewers' fear of crime. Critical Criminology 00:1-20.
- [13] J. Carlson. (1985). Prime Time Law Enforcement. New York: Praeger.
- [14] E, Kaminski, R. J., & Jefferis. (1998). The effect of a violent televised arrest on public perceptions of the police: A partial test of Easton's theoretical framework. Policing: *An International Journal of Police Strategies and Management*, 21(4):683-706.
- [15] M. Sigelman, L., Welch, S., Bledsoe, T., & Combs. (1997). Police brutality and public perceptions of racial discrimination: A tale of two beatings. Political Research Quarterly, 50(4), 777–791.
- [16] R. Tuch, S. A., & Weitzer. (1997). Trends: Racial differences in attitudes toward the police. *The Public Opinion Quarterly*, 61(4), 642–663.
- [17] R. Weitzer. (2002). Incidents of police misconduct and public opinion. *Journal of Criminal Justice*, 30: 397-408.
- [18] M. Kaplan, A. M., & Haenlein. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons:* 53, 59-68.
- [19] C. Pascu, Osimo, D., Ulbrich, M., Turlea, G., & Burgelman, J. C. (2007). The potential disruptive impact of Internet2 based technologies. *First Monday*, 12 (3).
- [20] Z. Stambor. (2005). Emotionally loaded topic may impair speech. *Monitor on Psychology*, 36: 15.
- [21] B. Berelson. (1952). Content Analysis in Communication Research. Glencoe, Ill: Free Press.

- [22] D.M. Stone, P.J., Dunphy, D.C., Smith, M.S., & Ogilvie. (1966). The General Inquirer: A computer approach to content analysis, Cambridge, Mass: MIT Press.
- [23] L. Pang, B., & Lee. (2008). Opinion Mining and Sentiment Analysis. Foundations and Trends in Information Retrieval, 2: 1-135.
- [24] B. Liu. (2012). Sentiment Analysis and Opinion Mining. Morgan & Claypool Publishers.
- [25] K. Dave, Lawrence, S., & Pennock, D.M. (2003). Mining the peanut gallery: Opinion extraction and semantic classification of product reviews. WWW 2003.
- [26] J. Jackson, J., & Sunshine. (2007) Public Confidence in policing: a neo-Durkheimian perspective. *British journal of criminology*, 47 (2). Pp. 214-233. ISSN 0007-0955
- [27] H. Rahm, E., & Do, H. (2000). Data Cleaning: Problems and Current Approaches. *IEEE Database Engineering Bulletin*, 23(4): 3-13.