Boys versus Girls: Gendered Presentations of Newborns via Instagram Photograph Uploads

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Abstract

The present study examined the prevalence of gender stereotypes displayed in photograph uploads of newborns in the mobile social media application, *Instagram*. A quantitative content analysis was performed on a sample of 120 of the most recent photograph uploads with the hashtag streams "*#newbornbabyboy*" and "*#newbornbabygirl*". 60 of these images consisting of each newborn females and males, collected between the 26th and 27th of March, 2014. Results showed that newborn baby boys were only portrayed in a gender-stereotypical manner where the most predominant clothing colour worn was blue. For girls, the results also revealed a gender-stereotypical pattern as pink was the most displayed clothing colour. There was no significant difference found between male and female newborns in how often they were accessorized. The primary source of the photograph uploads were most often the babies' mothers.

Introduction

Gender remains highly significant in determining the fate of individual expectations and treatments. In North America, notions of gender are largely communicated in various forms of media whether it may be images, words, or language. Although "gender" refers to how individuals identify themselves with the way they behave, think, and feel, it is determined at a sociocultural level through processes of socialization with adherence to broad social

norms (Symbaluk & Bereska, 2013). Western societies alike reinforce the notion that having either male or female biological sex characteristics automatically determines gender in the same dualism, rather than viewing gender on a wide spectrum (Symbaluk & Bereska, 2013). Upon birth, newborn babies are treated according to their assigned gender. For instance, Rubin, Provenzano, & Lurra (1974) note that newborn baby girls are described by their parents as "delicate" and "weak" while newborn baby boys are described as "strong" and "alert" within 24 hours of birth.

Gender stereotypes are powerfully, yet easily, presented through various socialization techniques in the early years of development. To illustrate, Pomerleau, Bolduc, Malcuit, and Cossette (1990) analyzed the physical environments of 120 first-born boys and girls with the aim to study the emergence of gender differences in infancy. Specific items analyzed in this study were the quantity and types of toys, types and colours of clothing and accessories, and the children's room décor. Three groups of 40 babies were each examined from the age groups of 5, 13, and 25 months. Upon completion of their investigation, traditional gender stereotypes were largely revealed in their findings. Girls were found to wear more pink and multi-coloured clothes, have a larger availability of dolls, fictional characters, and other toys related to domestication; boys were found to wear more blue, red, and white coloured clothes, with a larger presence of sports equipment, tools, and toy vehicles (Pomerleau et al., 1990). As a result, the researchers inferred that parental encouragement to select and pass on gendered toys to their children before they are able to express their own preferences plays a significant role in reinforcing gendered expectations to the extent that the child's later choice of play will be affected.

In addition to parental influences, the Internet similarly reinforces gender stereotypes. The Internet serves as a powerful catalyst of consumer marketing and purchasing culture that continues to escalate in popularity (Auster & Mansbach, 2012). Auster and Mansbach (2012) conducted a content analysis on the Disney store website and the extent and significance of gender differentiation present in the toys available for purchase was analyzed. Toys were found to be marketed in separate classifications on the store website that were categorized as either "girls only," or "boys only," (Auster & Mansbach, 2012). Almost all of the weapons, small vehicles, action, and building toys were found in the "boys only" category, reproducing the associations of physicality with hegemonic views of masculinity. In comparison, practically all of the toys available in the "girls only" category consisted of dolls, items related to beauty, cosmetics, jewellery, and domestic work; replicating strong, traditional ties of femininity with nurturing and domestic qualities, and concern for physical attractiveness (Auster & Mansbach, 2012). As children spend a significant amount of time playing with toys by themselves, with their friends and family members, one cannot deny that toys play a fundamental role in children's lives and socialization. As a result, obvious connections can be made between the Internet, other forms of media, and transcribed notions of gender geared towards children and parents.

One of the most common ways in which gender stereotypes are repeatedly communicated and reinforced is through social media. Most individuals today use some form of social media to communicate different messages in the forms of text, images, video, and more. As we become accustomed to consistent notions of gender in the mass media, we consequently promote those same notions in social media as gender roles and identities are a significant part of everyday life constituted through social

interaction (Roseet al., 2012; Symbaluk & Bereska, 2013). Also, since the rise of popular social networks such as *Facebook*, *Twitter*, and *Instagram*, users are limitless to communicate with one another, and create, portray, and reinforce gender identities in the virtual community to the point where it becomes routine action in everyday life.

In sum, as social media has become the primary tool for many to communicate with, it is fair to say that stereotypical notions of gender become socialized to all types of individuals utilizing social networks such as *Instagram* who then as parents, present their children in stereotypically gendered environments in photograph uploads. In effect, children are socialized within stereotypical gender norms to the extent where they choose to colour gendered images stereotypically (i.e. in colouring books), such as in the study conducted by Karniol (2011); and attain their own clothing colour preferences in the early ages between 6 and 9 influenced by early socializations as found in the study conducted by Kilinç (2011).

The purpose of this content analysis is to analyze photograph uploads of newborn babies onto *Instagram* with different variables taken into consideration to determine the extent of how stereotypically gendered newborns are displayed. In addition, as *Instagram* has recently grown from its beginnings in October 2010 into a large social network that is virtually public to anyone, it is important to consider *Instagram* as a unique platform for research, especially since its primary form of communication is through photograph and video uploads (Instagram, 2014). It is also important to note how gender stereotypes are presented in day-to-day life and see if they remain consistent with research that has been performed in the past such as the ones mentioned previously.

Background

Since its launch on October 6, 2010, *Instagram* has become a massive photo, video, and social networking mobile application that allows over 150 million registered users to capture, transform, and post their photos and videos onto the network (Instagram, 2014). Users are able to "follow" other users in order to be aware of what they post onto the network as often as they would like. Individual *Instagram* accounts may be of family, friends, organizations, businesses, and even celebrities. Furthermore, users may choose to keep their posts private by only allowing a select followership to see their posts, while other users may choose to further publicly post as far as onto other major social networks such as *Facebook* and *Twitter*. As these uploads are uniquely capable of reaching vast numbers of individuals in the world, *Instagram* is undoubtedly a significant medium to obtain data from.

Close to 60 million photos are uploaded every day onto *Instagram* (Instagram, 2014). Once users upload their own photo they are able to; add captions, hashtags using a "#" symbol, and mention or tag other users by using a "@" symbol. For the most part, users consume photos and videos on *Instagram* by viewing the homepage of the application where a "stream" of the latest posts from all the individuals they follow are listed chronologically. Thus, users are also able to immediately like or comment on posts once they come across them. Users are also able to consume posts on *Instagram* through the use of hashtags. Hashtags are a unique tool in the recent years of the social media explosion which further allows *Instagram* users to describe their photos however they may choose to. As users place hashtags on their own posts, they become connected to other posts with the same hashtag. One can see an entire stream of the latest posts of the same single hashtag used, listed in chronological order. To access this stream, one can either

click on the hashtag located on the post or use the search tool on *Instagram* and type out the exact hashtag one is seeking. Thus, hashtag "streams" become useful in analyzing as a whole because one is able to gain access to several posts regarding the same nature or theme of the hashtag.

Ultimately, as this quantitative study attempts to analyze gender stereotypes in newborn babies, *Instagram* serves as a useful and unique platform to do so in the contemporary age of social media. By observing the hashtag streams of "*#newbornbabyboy"* and "*#newbornbabygirl"* separately, one can see how *Instagram* users present or manipulate the gender presentation of newborn babies in their posts contemporarily.

Hypotheses

The following is a list of initial hypotheses the principal researcher takes into consideration for the purpose of this study:

Hypothesis 1a: Male newborns are more likely to be displayed wearing traditionally stereotypical masculine coloured clothing (blue, black, and grey).
Hypothesis 1b: Female newborns are more likely to be displayed wearing traditionally stereotypical feminine coloured clothing (pink, purple and white).
Hypothesis 2a: Female newborns are more likely to be accessorized in comparison to males.
Hypothesis 2b: When accessories are present, male newborns will be displayed mostly with toys.
Hypothesis 2c: When accessories are present, female newborns will be displayed mostly with head bands.
Hypothesis 3: Most identified *Instagram* users will be the mothers of the newborn babies presented in the photographic uploads.

Method

Sample
The purposive sample consisted of 120 photographs containing babies as the central figure that were publicly uploaded onto *Instagram* by numerous users.

Sample Selection
On the 26th and 27th of March, 2014, the principal researcher analyzed a total of 120 photos from *Instagram.* Data collection was obtained from the 60 most recent uploads that appeared on the *Instagram* stream *"#newbornbabyboy"* out of 974 posts available since 8:00 A.M of March 26, 2014. Data collection of the 60 most recent *Instagram* uploads out of 1365 posts available on the *Instagram* stream *"#newbornbabygirl"* since 6:00 P.M. on March 26, 2014.

Inclusion and Exclusion Criteria
Generally, the most recent *Instagram* uploads that used either the hashtags, *#newbornbabyboy* or *#newbornbabygirl,* were included in the sample selection. Although this study is interested in how gender is presented in the image uploads of newborn babies on *Instagram,* there were certain exclusions present in the sample selection. Video uploads present on either stream were omitted as this study aimed to consider only *Instagram* photo uploads as the unit of analysis. Another exclusion was towards images that had no babies present as the central figure in the image upload. For instance, images that were strictly advertising a product were not included. Another exclusion was towards images that had more than 1 baby in the photo as the central figure.

Units of Analysis
The units of analysis for this study were 120 image uploads, including N = 60 image uploads from the

#newbornbabyboy stream and N = 60 image uploads from the *#newbornbabygirl* stream.

Setting and Materials
Coding took place at MacEwan University where the principal researcher attends. Necessary materials included an *Instagram* compatible device (iPod Touch, iPad, iPhone, or Android), connection to the Internet, registered and active *Instagram* account, and a statistical program such as SPSS.

Coding Procedures
Each hashtag stream within the set parameter of 60 uploads were examined individually. For each image, the principal researcher recorded the colour of the baby's clothing. The presence of accessories was also noted along with the type of accessory featured in the photograph. Lastly, the relationship of the central account user to the baby in the photograph was also recorded. Data from each photograph was then entered into SPSS and aggregated for subsequent data analysis.

Main Variables
Four main variables were examined in this study: clothing colour, presence of accessories, type of accessories, and relationship of user to central figure. *Clothing colour* referred to the predominant colour of the baby shown in the photo's clothing categorized as (1) cream, (2) pink, (3) white, (4) grey, (5) purple, (6) orange, (7) red, (8) blue, (9) nude, (10) green, and (11) brown (displayed in the photograph and determined by the principal researcher). *Presence of accessories* referred to whether or not an accessory was present in the image and was utilized by the central figure in the photograph categorized as either (1) present or (2) absent (revealed in each photograph). *Type of accessories* referred to the specific type of

accessory in each photograph if they were present, and were categorized as (1) head band, (2) hat, (3) mitten, (4) toys, (5) crown, (6) hair tie, (7) pacifier, (8) basket, and (9) necktie (displayed in the photograph and determined by the principal researcher). *Relationship of user to central figure* refers to the relationship the *Instagram* account user to the baby in the photograph categorized as (1) mother, (2) father, (3) photographer, (4) uncle, (5) aunt, (6) cousin, (7) sister, (8) nurse, (9) friend and (10) unknown (revealed in either the comments, hashtags, or profile of the *Instagram* user who uploaded the photograph).

Design

Content analysis was used to examine how *Instagram* users would present the central figures, newborn baby boys and girls, and the ways in which gender was expressed upon those newborns.

Results

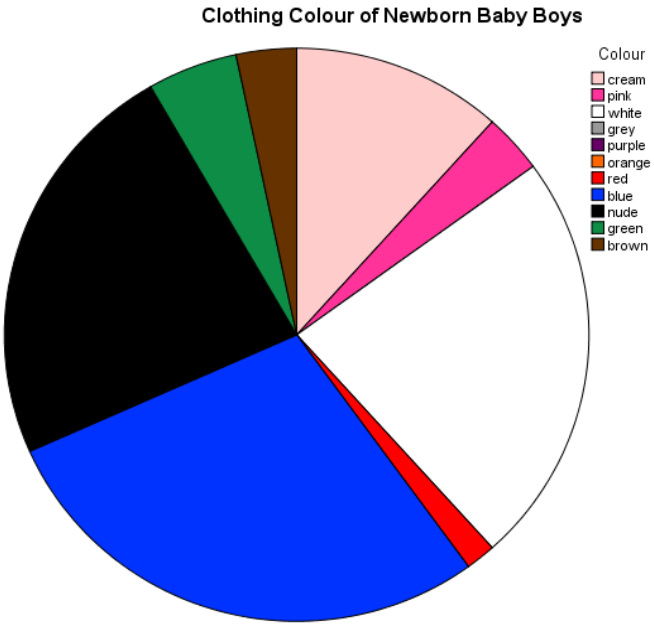
Data analysis

From the two hashtag streams, *#newbornbabyboy* and *#newbornbabygirl*, a total of 120 images were individually analyzed by the principal researcher. Raw data was entered into an SPSS spreadsheet for subsequent quantitative data analysis (e.g. descriptive statistics).

Hypothesis 1a: Male newborns are more likely to be displayed wearing traditionally stereotypical masculine coloured clothing (blue, black, and grey).

Results showed that male newborns were most likely to be displayed in blue or a neutral color such as white or nude (Figure 1a).

Figure 1a. Predominant Clothing Colour Worn by Males



The following list shows the percentages of each recorded colour worn by newborn males in descending order: blue (28.3%), white (23.3%), nude (23.3%), cream (11.7%), green (5.0 %), brown (3.3%), pink (3.3%), and red (1.7%) (Table 1a).

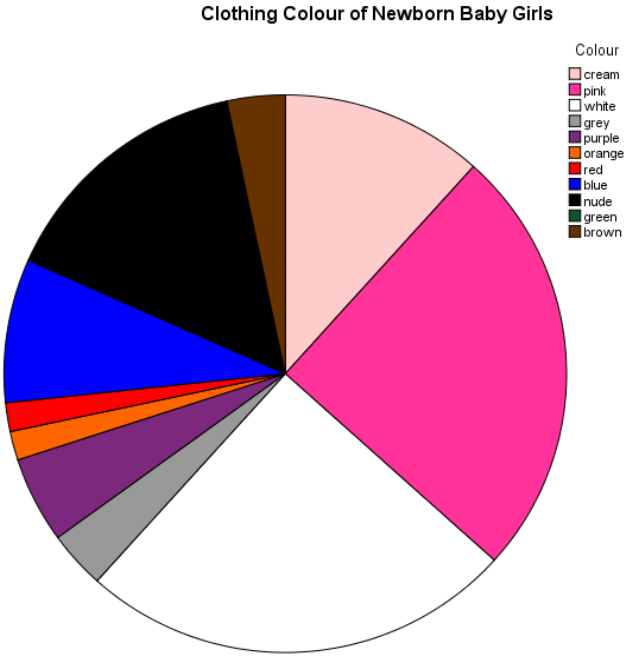
Table 1a. Predominant Clothing Colour Worn By Males

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	cream	7	11.7	11.7	11.7
	green	3	5.0	5.0	16.7
	brown	2	3.3	3.3	20.0
	pink	2	3.3	3.3	23.3
	white	14	23.3	23.3	46.7
	red	1	1.7	1.7	48.3
	blue	17	28.3	28.3	76.7
	nude	14	23.3	23.3	100.0
	Total	60	100.0	100.0	

Hypothesis 1b: Female newborns are more likely to be displayed wearing traditionally stereotypical feminine coloured clothing (pink, purple and white).

Results for female newborns indicated the prevalence of pink followed by the neutral colours white and nude (Figure 1b).

Figure 1b. Predominant Clothing Colour Worn by Females



The following list shows the percentages of each recorded colour worn by newborn females in descending order: pink (25.0%), white (25.0%), nude (15.0%), cream (11.7%), blue (8.3%), purple (5.0%), grey (3.3%), orange (1.7%), and red (1.7%) (Table 1b).

Table 1b. Predominant Clothing Colour Worn By Females

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	cream	7	11.7	11.7	11.7
	brown	2	3.3	3.3	15.0
	pink	15	25.0	25.0	40.0
	white	15	25.0	25.0	65.0
	grey	2	3.3	3.3	68.3
	purple	3	5.0	5.0	73.3
	orange	1	1.7	1.7	75.0
	red	1	1.7	1.7	76.7
	blue	5	8.3	8.3	85.0
	nude	9	15.0	15.0	100.0
	Total	60	100.0	100.0	

Hypothesis 2a: Female newborns are more likely to be accessorized in comparison to males.

A cross tabulation of the baby's sex, and presence or absence of accessories, was conducted. A presence of accessories was shown in 51.7% of newborn males while there was a presence of accessories displayed in 63.3% of females. A Pearson Chi-Square test for the association between sex of the baby in the *Instagram* photographs and presence of accessories showed no relationship, χ = 1.671, n.s.

Hypothesis 2b: When accessories are present, male newborns will be displayed mostly with toys.

The following list shows the percentages of each recorded type of accessory of newborn males in descending order: hat (58.1%), toys (9.7%), crown (9.7%), pacifier (9.7%), basket (6.5%), mittens (3.2%), and necktie (3.2%) (Table 2a).

Table 2a. Types of Accessories Present in Newborn Males

	Frequency	Percent
hat	18	58.1
mitten	1	3.2
toys	3	9.7
crown	3	9.7
pacifier	3	9.7
basket	2	6.5
necktie	1	3.2
Total	31	100.0

Hypothesis 2c: When accessories are present, female newborns will be displayed mostly with head bands.

The following list shows the percentages of each recorded type of accessory of newborn females in descending order: head band (47.4%), hat (31.6%), mittens (7.9%), toys (7.9%), crown (2.6%), and hair tie (2.6%) (Table 2b).

Table 2b. Types of Accessories Present in Newborn Females

	Frequency	Percent
head band	18	47.4
hat	12	31.6
mitten	3	7.9
toys	3	7.9
crown	1	2.6
hair tie	1	2.6
Total	38	100.0

Hypothesis 3: Most identified *Instagram* users will be the mothers of the newborn babies presented in the photographic uploads.

The following list shows the percentages of each recorded type of relationship the uploader had with the baby as the central figure in the photographs from the selected sample in descending order: mother (36.7%), photographer (28.3%), unknown (16.7%), friend (7.5%), father (3.3%), aunt (2.5%), uncle (1.7%), nurse (1.7%), sister (0.8%), cousin (0.8%), and brother (0.0%) (Table 3).

Table 3. Relation of Photograph Uploader to Newborn Baby in Sample Images

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	mother	44	36.7	36.7	36.7
	unknown	20	16.7	16.7	53.3
	father	4	3.3	3.3	56.7
	photographer	34	28.3	28.3	85.0
	uncle	2	1.7	1.7	86.7
	aunt	3	2.5	2.5	89.2
	cousin	1	.8	.8	90.0
	sister	1	.8	.8	90.8
	nurse	2	1.7	1.7	92.5
	friend	9	7.5	7.5	100.0
	Total	120	100.0	100.0	

Discussion

Hypothesis 1

Considering the results of aforementioned research on the gender of colours for babies and children the principle researcher hypothesized that newborn baby boys and girls would be portrayed in clothing colours that remained stereotypically gendered (Auster & Mansbach, 2012; Karniol, 2011; Pomerleau et al., 1990). The results demonstrated that the top 2 predominant clothing colours worn by newborn males were blue and white, while the 3rd predominant option was to have the baby pose nude. Blue was still the dominant colour worn by newborn males, being the most stereotypically gendered. In comparison, the top 2 predominant clothing colours worn by newborn females were pink and white, while the 3rd predominant option was to have the baby pose nude. Pink remained the dominant colour worn by newborn

females, being the most stereotypically gendered. Yet, white, a gender-neutral colour, was the 2nd most dominant colour worn by males and females. Consequently, there may be a rise in the portrayal of newborns in gender-neutral clothing colours to resist the gender norms in baby clothes.

Hypothesis 2

Considering the study done by Auster and Mansbach (2012), the principle researcher hypothesized that newborn baby girls would be accessorized in photograph uploads more often than newborn baby boys. In addition, when they would be accessorized, boys would be found most often paired with toys whereas girls would be paired with headbands. However, there was no significance shown in terms of a newborn's sex causing a difference in having accessories present; and the overwhelmingly predominant type of accessory when present with newborn baby boys were hats. The most predominant type of accessory when present with newborn baby girls was headbands.

Hypothesis 3

As mothers are most often stereotypically thought of as the caregivers of children, thereby often being held responsible for their children's socialization, the principle researcher hypothesized that mothers would be the most common source of the photograph posted onto *Instagram* with the given hashtag streams (Symbaluk & Bereska, 2013). Mothers were the most dominant type of users to upload photographs of their own newborns onto *Instagram* in the present study. Professional photographers followed as the 2nd most often agent to upload these images. Therefore, it is important to consider that mothers and professional photographers reinforce the portrayal of gender in newborns onto

Instagram, demonstrating to the world what a newborn baby boy or girl looks like.

Limitations

This study provides a unique contribution by investigating the prevalence of gender clothing stereotypes in newborns via *Instagram* uploads and connects its findings with traits emerging from existing research. As *Instagram* is a fairly new addition to the realm of social media, it deserves much attention from the research community that is comparable to other outlets of social media. It is unique in which deep insights reflecting numerous issues in contemporary society may be addressed through the numerous themes that are possible to explore due to the copious amounts of photograph and video uploads present. With the provided example of gender presentations of newborn baby boys and girls, as analyzed in this study, it serves as a small example as to what other research topics one could house to gain a deeper understanding through the use of communication via social media.

Although this study is unique, it still faced certain limitations. In some cases, the principle researcher was unable to determine the uploader's sex and determine relationship of the uploader to the central figure in the image, the baby. Another limitation that the principal researcher experienced was that *Instagram* only allows the option to search a single hashtag at a time. If the option to search multiple hashtags at a single time had existed, then one could narrow down their search if particular themes of interest to researchers require a larger specificity to their inclusion criteria greater than that of this study's. Another methodological limitation of this study involved the bias of selecting images that used the aforementioned hashtags specifically, thereby not including images of a similar scope with similar hashtags,

or ones that do not use hashtags to describe their images at all. At the time of analysis, *Instagram* was only available for those who own a mobile *Apple* or *Android* device, and therefore did not give as significant of a generalization to the world population as *Facebook* might have. Lastly, *Instagram* users have control to communicate their posts, however, they may choose a sense that is unique to the user themselves. For instance, when *Instagram* users hashtagged "*newbornbabyboy"* or "*newbornbabygirl"* in their image posts, whatever age constitutes newborns to those individuals is unique to them and therefore, not uniform. As a result, the primary researcher was not able to measure the exact age of each newborn present in each of the image uploads.

Suggestions for further research

This quantitative study demonstrates the prevalence of parents that present gender onto their newborns and communicate it through social media. It should be worthwhile, then, to consider employing qualitative content and discourse analyses to explore the ways in which newborns are stereotypically portrayed in how they are described with the comments used and other hashtags present on the images, and to uncover any additional silent narratives that a quantitative approach cannot fully uncover. Furthermore, as this study explored the prevalence of gender stereotypes in *Instagram* uploads in newborns, there may be possibility that gender stereotypes are displayed more strictly as these newborns, and other newborns in the contemporary age, grow older. Future directions of research may also look at how parents ultimately enforce gender onto their children through their communications on *Instagram* and other emerging social media outlets, as well as analyse the overall impact of communicating gender stereotypes and norms in the contemporary age. Lastly, with the

possibility of further resistance to current gender norms and the rise of study of problematic gender norms, more research can be done on the ways in which parents and children resist these norms and observe if traditional notions of gender become disrupted and nuanced as a result.

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