

*Original article*

## Trypophobia an Unrevealed Truth: A Glance of Its Awareness and Prevalence in General Population of Pakistan

Somia Gul<sup>1</sup>, Afsa Jilani<sup>2</sup>, Aisha Aziz<sup>3</sup>

### Abstract:

**Background:** Trypophobia is a psychological fear and has been described as a phobia to images with high-contrast energy at low and midrange spatial frequencies, such as holes and repetitive patterns. **Method:** This randomized study was conducted from September 2016 to March 2017 (n=214) through online surveys, visiting various university departments, interviewing common laymen and individuals from dissimilar families to approach maximum number of participants with less biasness. This was a useful survey for assessing the level of awareness and number of causalities in Pakistani population. **Result:** Results of current study show that there were few individuals diagnosed with trypophobia and were trying to get rid of it. Other individuals were either unknown or confused about this fear. **Conclusion:** We conclude that this study is beneficial for assessing presence of trypophobic fear in Pakistani population.

**Keywords:** Trypophobia; Physiological Phobia; Goosebumps; Fear

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### Introduction:

Trypophobia is one of the reported phobias, defined as the irrational fear of holes<sup>1</sup>. This term is derived from Greek language which means punching holes. It has also been reported as 'Hole phobia' on a Geocities page.

The term trypophobia was first raised in an online forum in 2005. It was then published in Urban Dictionary in 2008<sup>2</sup>. Trypophobia got publicity in 2013 through pictures of naturally found objects including dew on the leaf margin, honeycomb and 3D patterns on our cloths<sup>3</sup>.

Trypophobia can be anything that can make an individual phobic, hysteric, anxious and having unwanted sensations<sup>4</sup>. This fear of clusters is relatively an unknown peculiar phenomenon that affects thousands of people. Researchers have also suggested that this unconscious fear of trypophobia can be due to images of spectral characteristics of

dangerous animals like Brazilian wandering spider, the stonefish, the death stalker scorpion, the king cobra snake etc<sup>5</sup>.

There have been different theories associated with trypophobia. One theory defines it as combined product of fear to high contrast images of skin of poisonous animals and rough circular clusters on human. Another theory defines it as involuntary response towards dermatosis. These theories are not supported by any evidence. Various aspects of trypophobia including clinical features, socio-demographic variables, co-morbidities and psychological traits have been reported<sup>6</sup>.

Another research done through questionnaire about visual stress states, unfiltered images associating this condition reveals a high score of disturbance and disgust feelings than to those with control and filtered images hence they did not correlate with anxiety.<sup>(7)(8)(9)</sup>

1. Somia Gul, Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Jinnah University for Women
2. Aisha Aziz, Department of Pharmacology, Faculty of Pharmacy, Jinnah University for Women
3. Afsa Jilani, Faculty of Pharmacy, Jinnah University for Women.

**Correspondence:** Somia Gul, Professor, Faculty of Pharmacy, Jinnah University for Women, Pakistan. email: [drsomi1983@yahoo.com](mailto:drsomi1983@yahoo.com), ORCID ID: 0000000297428753

Briefings from Dr. Mariam Kinai's published book on tryphobia show that this phobia is just an illness of mind and can be managed with peaceful mind. This book also describes causes, symptoms and precautions of tryphobia. Symptoms of tryphobia are associated with varying degrees of intensity, from mild aversion to an immediate, intense feeling of disgust, fear, or even a full-blown panic attack <sup>9</sup>.

Although this phobia is not recognized in the American Psychiatric Association's current *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)*, but it is published in a peer-reviewed study that 15 percent of adults (18 percent of females and 11 percent of males) experience tryphobia to some degree <sup>10</sup>.

Spectral analysis on various tryphobic images show that stimulus inducing this fear has a spectral composition and high-contrast energy at midrange spatial frequencies <sup>11,12</sup>.

Petronius Jablonski interprets "tryphobia" as a discovery, not an illness, holes with so many conspiracies evolving hundreds of fears, hypnotizing individuals. This holes' pattern is a symbolic code, found so often in nature, as object of disquiet and meditation<sup>13</sup>.

In another study, a case report has been presented describe the case of a girl who suffers from a phobia to repetitive patterns, i.e. tryphobia<sup>14</sup>.

The aim of current research is to evaluate the level of awareness about tryphobia in general population of Pakistan through online survey and local visits. This study also addressed types of fears associated with tryphobia.

**Methodology:**

A randomized study was conducted from September 2016 to March 2017 (n=214) through online survey and by visiting diverse local areas including various university departments, common laymen and individuals from dissimilar families to approach maximum number of individuals with less biasness. The general population was marked for their genders and was inquired for any type of general phobias and specifically about fears regarding clusters of tiny holes, honeybee's comb, water droplets or any small circular shapes etc. The participants who were suffering from any type of phobia were further asked about need of counseling and supportive education to overcome severe consequences of this problem. The

collected data was then interpreted and evaluated statistically.

**Questionnaires**

The survey was conducted online through a questionnaire (Table 1). It was based on evaluating level of awareness and types of fears experienced <sup>15</sup>. Respondents were also asked about various stimuli triggering tryphobic fear.

**Table1: The Tryphobia Questionnaire**

Feel freaked out
Feel aversion, disgust or repulsion
Feel uncomfortable or uneasy
Feel like panicking or screaming
Feel anxious, full of dread or fearful
Feel sick or nauseous
Feel nervous (e.g., heart pounding, butterflies in stomach, stomachache, etc.)
Feel like going crazy
Have an urge to destroy the holes
Feel itchiness
Feel skin crawl
Have goose bumps
Feel like crying
Vomit
Get chills
Have trouble breathing
Shiver

**Statistical analysis**

Statistical analysis was done through descriptive statistics. T tests and chi-square tests were used for comparing stimuli enhancing tryphobia and also the level of awareness among various individuals.

**Ethical clearance:** This study was approved by ethics committee of Jinnah University for Women.

**Results:**

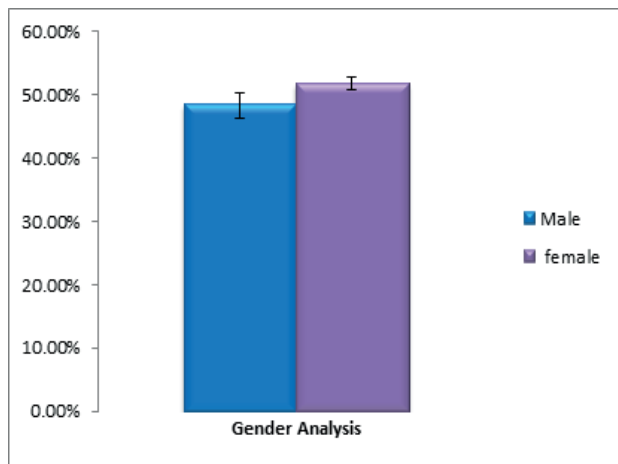
Among all the respondents 48.3% of male and 51.7% female participated in this study (figure no. 1). Investigations have shown that 36.7% of the total participants have certain fear or phobia in life. Further, 62.1% individuals of all participants were not having tryphobia (P<0.0001), 19.4% persons were unaware of the term tryphobia and 18.5% individuals were not sure of experiencing such fear at any stage of their lives (figure no. 2). Figure 3 shows that about 11.4 % persons out of sample population feel uncomfortable seeing symmetrical or

unsymmetrical shapes and 88.4 % found this fear as something natural ( $P<0.0001$ ), and 23.4% feel fear of holes and associated shapes.

Survey shows 43.3% individuals totally believe that phobic individuals should be guided and treated, 34.1% don't think that treatment can affect such phobias, while 22.6% don't know how to treat phobic individuals. The outcomes are summarized in Table 2.

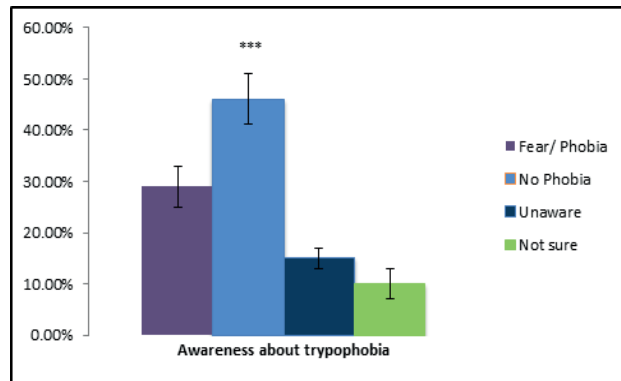
**Table 2: Summary of result outcomes of survey**

Gender Analysis	Results
Male	48.30%
Female	51.70%
<b>Awareness about Trypophobia in General Population</b>	
Fear/ Phobia	29.00%
No Phobia	46.10%
Unaware	15.00%
Not sure	10.00%
<b>Types of Stimuli Appear in Trypophobia</b>	
Symmetrical or unsymmetrical shapes	11.40%
Feel as natural fear	66.00%
Fear of holes and associated shapes	23.40%



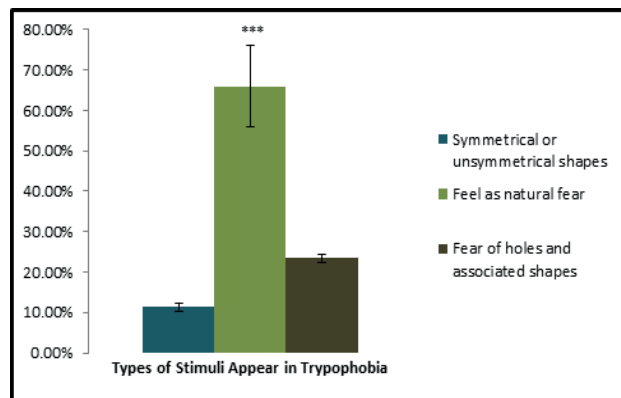
**Figure no. 1: Percentage Population of male and female participated in this survey**

The results show that percentage of female participants was more associated towards tryphobic fear



**Figure no. 2: Awareness about Trypophobia in General Population.**

The outcomes from the study have shown that significant number of Pakistani individuals ( $P<0.0001$ ) is associated with certain types of fear or phobias



**Figure no.3: Types of Stimuli Appear in Trypophobia.**

The results show that more than 60 % of the population ( $P<0.0001$ ) assumes tryphobia as natural fear.

It is important to note that during survey program, few tryphobic people reacted differently; few left the conversation as they feel highly uncomfortable, few got Goosebumps and they said they got few flash back of such images that scared them; while few talked about how does it feel and how they couldn't help themselves as there is no such better way from detaching their self from certain type of phobia and they are living in their fear and facing it daily, almost and let it remain un discussed.

**Discussion:**

Phobia is one of the predominant mental disorders, affecting 2.0% to 8.8%, of the general population<sup>7, 10, 11</sup>. According to some published articles

approximately 16 percent of people experience the fear called tryphobia<sup>6</sup>. Individuals (approximately 26.9%) between ages of 20 and 50 years have more prevalence of specific phobias<sup>16</sup>. Various stimuli can provoke tryphobic fear including visuals of honeycomb or barnacles<sup>7, 8</sup>. Tryphobic patients experience many symptoms like uncomfortable feelings, itchiness, anxiety and trouble breathing<sup>9</sup>.

None of the studies have been conducted on evaluating level of tryphobic fear in Pakistani population. The present study was designed to explore awareness of tryphobia and types of fear in Pakistani population.

Our data has shown higher prevalence rate of tryphobia in female than in male. This is in accordance with previous studies on evaluation of incidence rates and prevalence rates have been found to be higher in females than in males<sup>16, 17</sup>. Our study has shown that majority of the population had no information regarding tryphobia. Less than half of the respondents were aware of tryphobia. The rest were not sure regarding this particular type of phobia. These findings were in accordance with one of the studies performed on analysis of tryphobia in a survey based study<sup>18</sup>.

Further analysis was done on types of stimulus associated with tryphobia. The results show that majority of the respondents assume it as natural fear. More than 20 % have accepted this fear associated with holes, while some were having fear of symmetrical and asymmetrical shapes.

The survey had shown that 43.3% individuals totally

believe that phobic individuals should be treated, while many of the respondents have suggested that such individuals can't be treated.

#### **Conclusion:**

Current research evaluated the awareness of tryphobia in Pakistani population. This study further helped in recognition of possible stimuli which can trigger this phobia. Also it had provided concepts of respondents related with treatment of tryphobia. This study will provide an insight to researchers to explore mechanisms of such hidden phobias of the population which can lead to severe diseases.

#### **Recommendation:**

It is recommended that tryphobia should be further investigated on large scale and education and counseling should be providing to such individuals for improving their quality of life.

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**Conflict of interest:** No conflict of interest exists.

#### **Author's contribution:**

Data gathering and idea owner of this study: Somia Gul and Afsa Jilani

Study design: Somia Gul

Data gathering: Somia Gul, Afsa Jilani, Aisha Aziz

Writing and submitting manuscript: Somia Gul, Afsa Jilani, Aisha Aziz

Editing and approval of final draft: Somia Gul

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