Goal Orientation, Test Anxiety and Aggression in Medical and Non-Medical Students

Research Project

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Research Completion Certificate

Certificate that the research work contained in this research titled "Goal orientation, Test anxiety and aggression in medical students and non-medical students" has been carried out and completed by **Ms. Kainat Fatima, Student ID: SP17-BPY-023;** Student BS Psychology, session (2017-2020) under my supervision. This study is an independent research work and carried out under given instruction and consideration.

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Declaration

I, Kainat Fatima, Student ID: SP17-BPY-023, student of BS psychology session of 20172020, hereby declare that the material printed in this BS thesis project titled **"Goal Orientation, Test Anxiety and Aggression in Medical and Non-Medical students."** is an original work and has not been published previously or submitted in any form in any university or research institute in Pakistan or abroad.

At any time if my statement is found to be incorrect even after my graduation, the University has the right to withdraw my graduation degree.

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Signature of Declarer   Date:

Dedication

This research is dedicated to Almighty Allah who has given me the ability to do it, and my beloved parents; Zafar Iqbal and Sughra Bibi, my grandparent Hafiz Atta Husain, my brother Zeeshan Zafar, Noman Zafar, Ramzan Zafar, Salman Zafar, my sister Urooj Fatima and my supervisor Dr. Farzana Ashraf for their care, love, support and encouragement in completing my research.

Acknowledgement

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Abstract

The focus of the current study was to determine the goal orientation, test anxiety and aggression in medical and non-medical students. In this current research it was hypothesized that i) There is likely to be a correlation in goal orientation, test anxiety, and aggression. ii) Goal orientation, test anxiety, and aggression likely to vary in medical and non-medical students. iii) Demographic characteristics likely relate to goal orientation, test anxiety, and aggression in medical and non-medical students. The current study sample consisted of 300 medicals (n=202) and non-medical (n=99) students. The participant's ages range from 18 to 25 years (*M*=21.09, *SD*=1.93). These participants were selected through a convenient random sampling technique from medical college/university and non-medical college/university equally distributed in gender (Male=140) and (Female=160). Goal orientation scale (Was, 2006): Test Anxiety Questionnaire (Nist & Diehl,1990), The Aggression Scale (Orpinas & Frankowski 2001). For hypothesis testing, SPSS was applied to calculate the Independent Sample t-test, Pearson Product Moment Correlation and regression analyses. The results suggest that goal orientation has negative significant correlation with aggression and has positive significant correlation with test anxiety. The Independent sample t-test shows that aggression is significantly high in non-medical students while, goal orientation is more in medical students. Linear regression analysis revealed that aggression, marks and educations are the predictor of goal orientation, however aggression was found to be stronger predictor of goal orientation. This study can contribute in acknowledging the comparison between medical and non-medical students using present variables and more variables.

Keywords: Goal Orientation, Test Anxiety, Aggression, Medical, Non- Medical Students

Chapter 1

<center>**Introduction**</center>

Goal Orientation

Goal orientation is the extent to which the individual or entity emphasizes the goals and the end outcome of those tasks. Practical goal orientation promotes concentrating on the ends with which the tasks are done instead of the tasks themselves and how those ends can affect either the employee or the organization as a whole. Goal orientation is a rational context that defines a person's tactics for accomplishing conditions (Griffin, 2005).

One of the essential cognitive-social ideas is goal orientation, a commonly used conceptual paradigm for instructional psychology regarding student learning objectives. It applies to the aims or motives that the students pursue to direct their actions in the academic context (Salavera, 2019).

It is common to observe that people may have different ways to achieve a goal, described as someone's goal orientation (Dweck, 1986). To explain the principle of goal orientation, it is essential to return to the goal achievement theory, which proposed that target orientation can be graded as mastery and success target orientation. In the case of schooling, this means that mastery-oriented students concentrate on acquiring knowledge and skills, while performanceoriented students concentrate on performing more than others (Dweck, 1986; Nicholls, 1984). A presentation objective is an idea or aim of movements. It describes the need to achieve a detailed level of skill on a provided job, generally inside a particular time (Locke and Latham, 1990). Performing goal orientation is described and measured as a preference, not for tough performing objectives, but instead, for achieving fairly specific achievement to improve the likelihood of others' positive decisions (Gerard et al., 2004).

Goal orientation defines the network of emotions assigned to targets and the normative propensity to respond to individual behavior obstacles in particular contexts (Wimmer, 2018). Further characteristics of goal orientations are explained as followed; mastery-oriented priorities are characterized in terms of the emphasis on learning, the mastery of the task in compliance with self-established expectations, or self-improvement. It also includes learning new abilities, refining or developing skills, attempting to achieve something challenging, and seeking comprehension or perspective. Besides, the mastery approach guides one to try to do a task to enhance awareness, and mastery avoidance orientation encourages one to resist a task of accomplishment when one cannot complete a task effectively (Was, 2006).

Further, performance-oriented goals focus on demonstrating competence or ability to complete the task and how aptitude will be assessed about others. In extension to this approach oriented goal, people are entirely provoked to look good and receive satisfactory judgment from others. Avoidance-oriented goals in which people are damagingly driven to avoid failure and avoid looking incompetent (Was, 2006). Mastery goals usually encourage a personality-centered (or task-based) assessment of one's competency. Mastery discovering goals concentrate pupils' attention on improving the ability, understanding the mission to achieve a larger and richer experience with the mission, fully appreciate what they understand, be genuinely involved, and perform the task to reach competence. Individuals with a strong mastery goal training look at attempt as a means to accomplishment. It is crucial to suggest that pupils with robust mastery knowledge pieces of training are more prone to be constant in the face of problems and difficulties on their path to success (Gulseren, 2016).

A person's achievement goal symbolizes their purpose for engaging in a successful situation (Phan, 2008). Primarily, attainment purpose theoreticians exercised a proficiency

implementation purpose dichotomy in reporting for ability-based strains. Mastery-oriented people are driven to increase competence, understanding, and appreciation for what is being learned (Covington, 2000). On the other hand, people who are motivated to outperform others as a means to uplift one's ability status (Covington, 2000) or perform based on a normative-based standard (Zweig &Webster, 2004) are performance-oriented.

Theories of Goal orientation

Achievement Target Theory (Nicholls, 1989) argues that individuals address performance activities with markedly different expectations based on how they measure their skill and abilities. Goal orientation theory, logically based on goal achievement theory, suggests that people differ in interpreting achievement and assessing cognitive performance. The individual target viewpoint affects how one believes, behaves, and behaves in successful conditions, such as schooling and athletics (Nektarios et al., 2015).

Achievement goal theory (Nicholls, 1989) suggests that individuals method accomplishment tasks with qualitatively unique sorts of objectives varying on assessing their competency and capability. Goal orientation theory, which is hypothetically built on achievement goal theory, believes that people differ in the path they characterize achievement and justice professed competency. Different goal view motivates how one believes, thinks, and performs in accomplishment settings such as teaching and sports events. Based on Nicholls's theoretical work, (Duda 1992) planned the development of two major accomplishment goal viewpoints, such as task orientation and ego orientation, concerning and distinguishing how players assess their intensity of competence, attempt, and assessment accomplishment. In task training, capability appraisal is self-referenced and is determined in kin to one's seeming mastery, expertise, or knowledge. Enhancing mastery and the implementation of the mission at hand

remains the participant's main worry. In supplement, the recognized achievement is established on individual progress, aptitude understanding, and attempt exposition. General, task training relates to adaptive intuitions and encouraging accomplishment activities, such as continued participation in athletic situations, training, and best incentive, whatever of the individual's point of seeming skill (Duda, 2001).

Comparison of Goal Orientation in Medical and Non-medical Students

Anyone who has instructed medical students is acquainted with their intense need to do well and be rewarded for that success. This is especially true of the high-stakes evaluation. Many students feel that they require high marks to succeed, get it right, and prove their actual ability (Agnes & Geoffrey, 2013). Target orientation theory is a social-cognitive theory of motivation for success.

Medical students are typically intrinsically inspired to master the form of target orientation. The goal-oriented evaluation method operated in research included genius, execution-method execution-evasion, and effort-prevention elements to explain medical students' method to their educations. Male students are typically more performance-oriented, whereas female students are more mastery-oriented. Similarly, Grade Point Average (GPA) students demonstrate higher degrees of mastery and success orientation (Kool et al., 2016). This suggests that academic success target orientation will show a position in the success of learner medical students. Some findings suggested a link between understanding aim, self – efficacy, and innate purpose in non-medical student. Also, calculations suggested a correlation with the accomplishment goal line, self – efficacy, and innate purpose.

Test Anxiety in Students

Test anxiety is described as a crippling neurological condition. Any type of physical or emotional anxiety is typical to most test users. Some people exist in terror of a moment where their minds go blank. Others suffer gastrointestinal issues, headaches, or profuse sweating (Rupani et al., 2016).

Test anxiety is essentially a type of performance anxiety. Stress and anxiety induce wreak havoc on a student's ability to focus on studying, leading to low performance and, eventually, fewer chances to excel in school. Students in higher education institutions face many kinds of challenges that negatively affect their psychological feeling, causing them anxiety. (Nabila, 2020). Examination anxiety is a collection of reactions that involve unnecessary worry, depression, nervousness, and meaningless thought. To a class of stimuli dependent on an individual's knowledge of assessment/testing and effect (Hashmat et al.,2008).

Test anxiety is a type of competition anxiety when there is an expectation to do well in a particular situation. People may experience test anxiety for a variety of reasons. They may fear disappointment and future instability if they do not conduct a successful test (Kendra, 2019). Testing anxiety can affect learning motivation and contribute to procrastination. Regulator-worth theory of accomplishment feelings suggests that exam worry is the product of student evaluation of the test situation and its consequences. The impact of test anxiety has to do with stressors on social or behavioral wellbeing, cognitive function, and physical wellbeing (David, 2018).

Students have also identified the impact of anxiety on cognition. Specifically, the respondents clarified that both the ability to focus and recall information were impaired by nervous feelings (Gibson et al., 2014). While anxiety is a widespread undisputed condition in human life that influences their efficiency and efficacy in various circumstances, an average

amount of anxiety helps keep people working hard and accountable for what they have to do as well as allowing people to have a more sustainable and productive life (Farhad et al., 2011).

Medical school education is demanding and aims at graduating competent, qualified, and emotionally stable physicians who can fulfill the needs of their patients with sympathy and professionalism. Studies, however, suggest that licensed physicians suffer elevated levels of stress-related agitation and burn-out that not only threaten expertise but are also associated with medical accidents (Christine & Müller-Hilke, 2019).

Test anxiety occurs a state-detailed attribute that refers to the anxiety situations and fears ailments that are happened throughout exams. This type of anxiety seemed unexpectedly or steadily. Occasionally it is constant, and from time to time or end up within a few hours. Most pupils encounter test anxiety in the exam course. Still, when the anxiety impedes the pupil's ability to act in exams effectively and convey their information on tests, it enhances a dilemma (Tsegay et al., 2019).

Test anxiety is one of the main challenges in students and is often considered one of the key barriers to obtaining successful grades. When students take an exam, they experience some amount of anxiety that affects their performance. Anxiety is a state concerned with the future, in which the person prepares to deal with the coming problems (Barlow, 2000). High scorers experience lower test anxiety levels, and low scorers experience high test anxiety levels (Khalid and Hasan, 2009). As a result, it is suspected that test-anxiety individuals are compromised. They will need to make further effort to reach acceptable results but are incapable of performing the task. Data supports this view that test-anxiety, particularly concern, harms performance, and that working memory can be a trigger.

One of the important determinants of mental health is the level of anxiety. An undesirable and unclear feeling during the prediction of dangerous situations is called anxiety. The extreme form of these feelings destructively moves the bodily and rational fitness of the separate and eventually individual, joint, work-related, and didactic recital is severely pretentious. (Safeer & Shah, 2019). As per educational psychology and education specialists, an average degree of anxiety is an important motivating tool that may improve one's success by having more effort (Tsegay et al., 2019).

Stress and anxiety-related testing can be considered to play a dual role: hopefully, it promotes learning. It moves student academic success around the Yerkes-Dodson continuum to a more desirable stage. Besides, preparedness for pressure medicinal pupils can meet in ensuing repetition promote handling mechanisms. However, few pupils might be inspired by the tension and discomfort involved with the exam; it may be a discomfort to some because it has been proposed that they adversely affect career progress, show a part in erosion from medical seminary, and have an overwhelming impact on individual fine-life. (Hahn et al., 2017).

Comparison of Test Anxiety in Medical and Non-Medical Students

Previous research indicates that medical students who practice test anxiety appear to experience elevated psychological pressure and enthusiasm in their studies. Hospital school is rather stressful relative to most technical classes. Test of associated anxiety is the most significant issue of medical students. Female students were found to be more stressed than male students. Test anxiety is mutual with pupils. The academics and teachers in the schools must understand terrible and encouraging parts of this test anxiety that can affect students' accomplishment. A recent study indicates that working mind-body interventional programmers

encourage total fitness and welfare among the pupil populace. (Farrahdilla et al., 2018)

Aggression in Students

Aggression is an overt or indirect, often unpleasant, social activity to cause harm or other inconvenience to another person. It may occur either reactively or without provocation. In humans, violence can be triggered by several causes, including anger related to blocked targets to disrespect (Amber &Mark, 2014). It is rooted in an overall structure that could appear in the forms of anger, violence, physical, verbal, and relational Aggression (Ali et al., 2015).

Aggression may be either physical or verbal, and conduct is defined as aggression even though it does not directly inflict injury or discomfort. Aggressive behavior is the most important psychoactive risk factor. It is a multifaceted system that can impact students' emotional, mental, and physical wellbeing (Akram et al.,2019). Conferring toward Goodboy, Horan, and Chory (2010) found that violence exists as disruptive behavior, while Efrati-Virtzer and Margalit (2009) describe violence as destructive behavior. Violence is a feeling that is available to all of us. While outbursts of anger and aggression are deemed acceptable when they happen occasionally, disturbances that occur frequently and seem to be beyond someone's control could trigger a problem. In early childhood, for example, disruptive behavior is always common and stems from anger at having a limited capacity to communicate emotions. While youth conflict levels have continued to decrease (John et al., 2004), childhood conflict and youth conflict have become more widespread in media knowledge in the last two decades than ever before. One reasonably clear inference to be taken from the literature on adolescent aggression and conflict is that such conduct is a big issue at university. Prior findings have found that pupils who are very nervous about testing are likely to be females who favor preventive goals and are ill-adapted to

perfection. Performance targets have positive associations with worries linked with fear of failure and overall test anxiety. (KoUn & Kenneth, 2010). The outcomes showed that real violence was elevated in men with a moderate ego-reverence level than the ego-value unit's small and high ranking. Likewise, anger was certainly associated with self-esteem in women. In men, there was no link between ego-regard and various aspects of hostility. The research has substantial consequences for additional findings on ego-reverence and adolescent violence (Khaliq et al., 2018).

Summary

Goal Orientation, Test Anxiety, and Aggression in Medical and non-medical Students are well discussed. Goal orientation is a rational context that defines a person's tactics for accomplishing conditions. Medical students are typically intrinsically inspired to master the form of target orientation. The goal-oriented evaluation method operated in research included genius, execution-method execution-evasion, and effort-prevention elements to explain medical students' method to their educations. Non-medical students are also goal-oriented. Stress and anxiety induce wreak havoc on a student's ability to focus on studying, leading to low performance and, eventually, fewer chances to excel in school. Test of associated anxiety is the most significant issue of medical students. Female students were found to be more stressed than male students. Test anxiety is also associated with non-medical students. The most common type of aggression is verbal. Prior findings have found that pupils who are very nervous about testing are likely to be females who favor preventive goals and are ill-adapted to perfection. Performance targets have positive associations with worries linked with fear of failure and overall test anxiety

Chapter 2

Literature Review

In a recent study, Brigitte and Müller-Hilke (2019) found that medical students faced significant stress and anxiety volume because of exams. This research aimed to observe examrelated anxiety progress and test for a correlation between anxiety and knowledge tactics. To that level, the STAI-S in grouping with measure salivary hydrocortisone were active directly earlier deuce verbal composition assessments. Our greatest vital outcomes were that a superficial education linked through anxiety as an attribute and pupils with a mostly calculated method to knowledge was the minimum worried yet intellectually most effective. As external students are at a menace of existence intellectually less effective and anxiety is a condition for burn-out, we suggest that medical talents residence particular prominence on taking tactics for both, surviving with stress and active culture.

Patmawaty Taibe, Flemmings Fishani Ngwira, and Belay's (2017) research on abstract self-recommendation support that students' basic objective orientation and profound way of improving pupils' knowledge. This research aimed to measure the role of goal alignment in the student's learning method. Two hundred five pupils of male and female 84 and 121 males as of College of Medicine in Malawi retorted to a survey measuring their inherent objective alignment. Direct reversion outcomes specify that inherent goal orientation prophesied equally profound and meta-reasoning knowledge plans as mechanisms of profound knowledge method concept. Masculine pupils had advanced planes of basic objective alignment than feminine equivalents. There are no important changes among pupils from diverse education plans on essential objective orientation, profound and high-intellectual knowledge tactics. Hence it proves that it has

important work in medical a non-medical student is learning. Likely suggestions of consequences, references for the upcoming study remain debated.

Another study was conducted by Govindan and Kamath (2013). From a strategic perspective, achieving something is defined as a depot step that focuses on human efforts. Guidance on the four academic achievement goals is often recognized by professionals, methodology, recital evasion, and evasion of the act. The purpose of the research is to comprehend the nature of therapeutic pupils' goals graduating in the second year and how these eight applications works. Methods: The number of students who joined was 244 from the university. Students are classified as elite and best actors founded on their previous marks. The direction of objectives was assessed by a survey conducted. These types of machinery were analyzed by an example representing the t-examination and matched the test scores at their university in the first year. Results: An analysis of validated items excluded four items, which reported 40.8% of the fundamental difference in policy direction. A robust optimistic association is exposed amid presentation, recital avoidance, and performance-avoidance guidance. Of the IV-goalmouth alignment, only the lowest points in the job-avoiding direction are different for lower and upper-level players. The job-avoiding kind of objective-oriented approach between a sub-team may work with their lower performance than a team of top players. This shows that achieving educational goals can produce a part in the recital of learner medical pupils.

The extent of completeness and goal guidance has been stated to have a special relationship with examination concern. However, the extent of the relationship between the various sizes of completeness, the two × two-directional perfect planned by Elliot and McGregor, psychological testing concerns, and instructive presentation pointers are unknown.

134 college student's data we showed a corrective and adjustment analysis to examine the relations among complete and non-corrective correction, tetrad sorts of objective correction, psychological assessment concerns, and two indicators of academic performance: continuous mental function in the distal memory test. Of distance points. Psychological testing concerns were negatively related to both presentation pointers and were related to negative self-efficacy and targeting evasion goals. Flexibility and inconsistency have resulted in significant differences in psychiatric assessment concerns after controlling the avoidance and avoidance approach. Overall, about 50% of psychological anxiety variants may be due to gender, objective orientation, and completeness. The consequences were that the most tested pupils in the test were likely to be women who justified avoidance intentions and wanted to be unfairly perfect.

Latas and Pantic (2010) researched that during the test, some pupils faced worry. However, it represents an issue when anxiety affects the efficiency of the test. Assessment worry is a particular type of worry categorized by bodily, reasoning, and interactive indications of nervousness in test and exam training and recital situations. Once it develops so great that it delays test research and results, test worry transforms into an issue. This education's objective was to evaluate the attendance of examination worry in health pupils and examine certain features of examination worry in different genders of health pupils at different years of study and the risk of failing a year. The findings were obtained in the study: generally, medical students have moderate levels of test worry, feminine pupils have statistically applicable symbols of test worry that are more severe than masculine pupils, the most serious signs arise on the third day and the smallest in the fourth day of study, there is no statistically significant change between the students who have repeated one of the years of study and the normal students in the attendance of symptoms of examination nervousness.

Another past study shows that everyone wants high academic achievement, but a few students can hit the top rank in their class. This study's goal was to define certain variables responsible for the greater academic achievement of high achievements. In the end, it is recommended that children are given equal development opportunities and be disciplined from an early age to achieve higher study goals (Khan et al., 2013).

Mattern (2005) carried research showing that academic motivation theorists have differentiated between mastery goals and success goals. Mastery objectives have historically been related to adaptive learning outcomes, whereas success objectives have been correlated with maladaptive learning outcomes. Theorists have recently proposed that students can have equal control and achievement objectives and that similar goals may be useful. This study contrasted pupils who detained both objectives concurrently to pupils who held either control or success objectives solitary with their achievement patterns. One-way ANOVA presented no substantial alteration among the numerous goal collections and the solitary area collections using course grades to measure achievement. However, between the extraordinary control collection and the great efficiency collection, a major alteration was noticed.

Another study aimed to determine student achievement goal orientations and their effects on their recital in the English language at minor equal. The study used the Patterns for Adaptive Learning Scale developed while a multiple-choice test measured students' achievement. The study showed that students had a multiple-goal orientation. The majority of students had mastery goal orientation, followed by performance-avoid and performance-approach goal orientation. They were slightly more mastery-oriented in general. In the high-low category, they had high performance-avoidance goal orientation, followed by high performance-approach and high mastery goal orientation. It was concluded that students' performance was significantly correlated

with students' achievement goal orientation and students' mastery goal orientation was a strong predictor of achievement. Teachers may provide students with meaningful activities to increase their motivation and encourage them to learn. Efforts may reduce performance to avoid orientations in students (Basit1 and Rahman, 2017).

Another study showed the relation between violence and educational accomplishment among the greater inferior pupils (Alam, 2018). The Pearson Product Moment Method was applied to find out the relation between the factors. Results showed a harmful and statistically significant link between aggression and the students' educational accomplishment. In the present study, an attempt was made to uncover the relationship between anxiety and lower college students' educational attainment. For teachers who have discovered that some adolescents tend to perform at their best under high-pressure conditions, this research area has been of great importance. Students with increased anxiety were expected to behave less well during their research than unmotivated students. The biggest secondary point is a turning point for teenagers throughout their lives.

During this adjustment phase, students and their parents make their career selection choices. There are also troubling issues for young people in our schools that sometimes interfere with their academic success. During puberty, problems related to anxiety and anxiety are very common. The analysis results are as follows: There is a clear positive association between generalized anxiety and test-related anxiety. The relationship between general anxiety and academic achievement is negative. There is a weak negative correlation (-0.222) between test anxiety and high school students (Sridevi, 2013).

Past research has focused on various school variables in light of adolescent subjective wellbeing (SWB). However, while mutual causation has been speculated, the relationship

between adolescent SWB, academic achievement, and test anxiety remains open. The current study aims to examine the extent to which, over time, SWB, academic achievement, and test anxiety influence each other. The results showed that changes in the cognitive component of SWBB were predicted negatively by the anxiety component of test anxiety and positive GPA. In the effective portion of SWB, also worry negatively predicted changes. Also, worry has negatively expected shifts in the GPA of students. Guidelines for future study and the differential predictive effects of academic achievement and test anxiety on adolescents' SWB are discussed concerning possible underlying mechanisms (Steinmayr et al., 2016).

Gonida and colleagues explored the role of perceived school target structures, and parent objectives in predicting adolescents' goal orientations, and their behavioral and emotional involvement in the classroom was examined. Path analysis showed that perceived school mastery target structures and parent mastery goals predicted orientation of student mastery goal, perceived school, and parent performance goals predicted orientation of student performanceavoidance goal, while perceived parent performance goals only predicted performance-approach orientation; through the mediation of student mastery goal orientation, perceived school, and parent mastery goals predicted behavioral but not emotional engagement directly and indirectly; behavioral and emotional engagement was predicted by student mastery goal orientation. Results are presented about the current theory and its implications for supporting adaptive learning patterns in the school and family context (Gonida et al., 2009).

Indigenous Research

In a recent study, Hasnain, Dawood, and Malik (2018) researched academic endurance and target focus in medical students with high and low achievement. It was hypothesized that in high and low achieving medical students, there was likely to be a correlation in academic

resilience and target orientation, and academic resilience would predict achievement

goalorientation, academic resilience and goal-orientation would likely differ in the high and low

achievement of medical students. Academic flexibility was an important positive indicator of the

avoidance mastery strategy and success approach goals of low-performing medical students.

Additionally, there was no significant gap between high performing medical students and low

performing medical students in academic flexibility. Still, high performing students were more

goal-oriented than low performing students. Unlike women, the differences between the sexes

show that academic flexibility is greater among men.

The outcomes showed that real violence was elevated in men with a moderate

egoreverence level compared to the ego-value unit's small and high ranking. Likewise, anger was

certainly associated with self-esteem in women. In men, there was no link between ego-regard

and various aspects of hostility. The research has substantial consequences for additional

findings on ego-reverence and adolescent violence (Khaliq et al., 2018).

Another study found the effects of different levels of violence on the academic

performance of students. The result showed a negative effect of aggression on the academic

performance of students. However, a key distinction exists between students' academic

performance with low, medium, and high state aggression (Khurshid and Khurshed, 2018). The

research investigated the extent of test anxiety and its relationship with high and low achievers'

academic achievement. Also examined were gender differences in test anxiety for high and low

achievements and the interactive impact of gender and academic achievement on test anxiety.

Results have shown that high performers experience less test anxiety relative to low performers.

High female performers experienced more test anxiety in contrast with high male performers,

whereas low male performers experienced more test anxiety than low female performers. There

was also an important interactive impact of gender and academic achievement on test anxiety

(Khalid &Hasan, 2009).

The Rationale of the study

Literature is available on the association and cross-sectional studies of test anxiety and

goal orientation in medical students, but there is no comparative study between medical and

nonmedical students. However, there are a gap in knowledge concerning differences in goal

orientation, test anxiety, and aggression in. medical and non-medical students concerning their

demographic characteristics. The said phenomenon is understudied in Pakistan regarding

multiple aspects, and research needs to focus attention on the correlation between these variables.

Objective and Hypotheses

The research aims to explore goal orientation, test anxiety, and aggression in medical and

non-medical students.

1-   Goal orientation is negatively correlated with aggression and positively correlated with

test anxiety, in medical and non-medical students.

2-   Demographic characteristics likely relate to goal orientation, test anxiety, and aggression

in medical and non-medical students.

3-   There will be significant differences in goal orientation, test anxiety and aggression

between medical and non-medical students.

Chapter 3

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Method

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Operational Definitions.

    Goal orientation: Goal orientation is the extent to which the individual or entity emphasizes the goals and the end outcome of those tasks.

    Test anxiety: Test anxiety is a collection of reactions that involve unnecessary worry, depression, nervousness, and meaningless thought.

    Aggression: Aggression is an overt or indirect, often unpleasant, social activity to cause harm or other inconvenience to another person.

Research Design

    A cross-sectional research design explores goal orientation, test anxiety, and aggression in medical students and non-medical students in the current research.

Participants and Sampling Strategy

    The current study sample consisted of 300 medical (n=201) and non-medical (n=99) students. The participant's ages range from 18 to 25 years (*M*=21.09, *SD*=1.93). These participants were selected through a convenient sampling technique from medical college/university and non-medical college/university equally distributed in gender (Male=140) and (Female=160).

Measures

    A demographic sheet, along with three measures, will be used for the collection of data. Goal Orientation scale, Test anxiety Questionnaire, and The Aggression Scale.

    Goal orientation scale (Was, 2006): A 33-item questionnaire was used to detention each of the four defined goal orientations and its subscales, performance-approach n=8, performance

avoidant n=7, work avoidant n=5, mastery n=13) Objects were constructed on a Likert scale, and their Answers selections reached like very untrue, mostly untrue, somewhat untrue, somewhat true, mostly true or, very true. Earlier, the reliability of this scale is as α=.64, α=.71. (Was, 2006). In the current study, the alpha coefficient was seen as α=.90.

Test Anxiety Questionnaire (Nist & Diehl,1990): It consists of 10 items. Each item consists of 5 points scale, Never=1, Rarely=3, Sometimes=3, Often=4, Always=5. The total anxiety scale ranges from 10-50, where 10-19 indicates mild severity, 20-35 mild severity, 35-50 severe level.

The Aggression Scale (Orpinas & Frankowski 2001): It consists of 11 items. The ensuing inquiries rational of whatever you did during the last seven days. For each query, mark how several epochs you did that comportment through the previous seven times. The aggression scale range from 0-60. Earlier, the reliability of this scale is as α=.86, α=.88. (Orpinas & Frankowski, 2001). In the current study, the alpha coefficient was seen as α=.86.

Demographic Performa: In this study, the demographic Performa included the age, gender, family system, name of college/ university, years (current education), qualification, mode (medical, non-medical), marks in lass exam.

Procedure

Permission was taken from the department to collect the data from online/ Google form. All the ethical considerations were taken into account. Participants were told that their personal information would remain private and they can leave if they feel uncomfortable. Further, the members were briefed about the objective of the research. Data collection was completed online.

All the information was compiled, and to run numerical assessment, a numerical platform for the collective disciplines [SPSS] software was used. Furthermore, outcomes were taken into account for further discussion.

Statistical Analysis

Standard deviation, mean, frequencies, graphs, percentages, and frequencies were designed by statistical analysis. For hypothesis testing, SPSS was applied to calculate the Independent Sample t-test, Pearson Product Moment Correlation and regression analyses.

Ethical Consideration

The ethical considerations for conducting the research were followed very well. Approval from concerned authorities and contestants was signed before collecting data. Informed consent was obtained, and participants had the right to withdraw from the study at any time. It was assured that no emotional or physical harm was attached to the participants who volunteered to participate. Moreover, after being approved by the Approval and Ethical Committee of the Department of Humanities, COMSATS University Islamabad, Lahore Campus, the study was conducted.

Chapter 4

Results

Preliminary Analysis

In the first step, the cleaning of data was done, and the response rate was assessed, which was 100 % for the present study because participants were contacted directly by the researcher. Participants were administered all questionnaires online through a google form. Also, complete information was provided to them. In the second step, data was downloaded on an excel sheet directly from google form, and values were identified, replacing them with the series' mean score. In the next step, data was transferred from the excel sheet to the SPSS sheet, and frequencies were run to see all data's total estimation.

Descriptive Analysis

Table 1 of this study shows the descriptive characteristics of demographic variables. In the present study, the participants were adolescents ages between (18-25 years), having a mean of 21.09 and a standard deviation of 1.93. The study's total sample is 300 students (male = 140, female = 160), which is proportionate as the male comprises 46.8 % and female comprises 55.8%. Moreover, education of participants was taken as 1st year to 5th years i.e., 1st year 11%(n=33), 2nd year 18.6% (n=56), 3rd year 17.9% (n=54), 4th year 45.5%(n=137), 5th year 7%(n=21). Also divided into medical 68.4% (n=266) and non-medical 31.2%(n=94) students. Family structure was also measured as a joint family system 46.8% (n=133) and nuclear family system 53.2% (n= 168). In the current study, marks in last exam also measured and categorized into above 80% 34.8% (n=104), 60-80% was 55.5% (n=166) and below 60% was 9.7% (n=29) (see Table 1).

Table 1: *Descriptive Characteristics of Study Participants*

Variables	*M*	*SD*	*Min-Max*	*f*	%
Age (years)	21.09	1.93	18-25		
Education					
1st year				33	11%
2nd year				56	18.6 %
3rd year				54	17.9 %
4th year				137	45.5%
5th year				21	7%
Gender					
Male				141	46.8%
Female				160	53.2 %
Mode of Education					
Medical				266	68.4%
Non-medical				94	31.2%
Family Structure					
Joint				133	46.8%
Nuclear				168	53.2%
Marks in last exam	1.75	.619	1 – 3		
Above 80%				104	34.8%
60-80%				166	55.5 %
Below 60%				29	9.7%

Table 2: *Cronbach's Alpha Reliability of Study Variable*

Variables	n	M	SD	α	Min – Max		S	K
					Actual	Observed		
Aggression	11	16.73	12.36	.86	0 – 66	0 – 56	.630	-.230
Anger	2	3.59	3.59	.66	0 – 12	0 – 12	.888	.287
P. & V. Aggression	9	13.14	10.68	.86	0 – 54	0 – 48	.699	-.152
Goal orientation	33	132.0	24.72	.90	33–198	52 – 198	-.315	-.060
Mastery	13	54.65	11.65	.84	13 –78	25 – 78	-.374	-.290
Performance approach	8	31.55	7.35	.75	8 – 48	8 – 48	-.374	-.075
Performance Avoidant	7	26.21	6.41	.67	7 – 42	10 – 42	-.070	-.425
Work avoidant	5	19.62	4.57	.58	5 – 30	8 – 30	-.153	-.296
Test anxiety	10	25.43	7.49	.83	6 – 60	10 – 44	-.152	-.407

Note. S= skewness, K=kurtosis, P= physical, V= verbal

Table 2 shows the Cronbach's alpha reliability, standard deviation, internal consistency and mean score of the study variables. Alpha coefficient for these three scales and subscales were also assessed to measure internal consistency of all these scales. Alpha ranges .49 to .89 which appears to be acceptable in criteria of $\alpha \geq 0.9$= excellent, $0.9 < \alpha > 0.8$ = good, $0.8 > \alpha \geq 0.7$ acceptable, $0.7 > \alpha \geq 0.6$ = questionable, $0.6 > \alpha \geq 0.5$ = poor, and $0.5 < \alpha$ = inacceptable (George & Mallery, 2003). Though three of the alpha coefficients was below the required level

of 0.7 (e.g., aggression = .86, goal orientation=.90 and test anxiety= .83), the overall alpha

coefficient was satisfactory for the present study.

Table 3: *Mean Differences in Goal Orientation, Test Anxiety, and Aggression in Medical and Non-Medical Students.*

Measures	Medical students	Non-medical students	t
	M (SD)	M (SD)	
Anger	3.5 (3.1)	3.7 (2.6)	-.545
P. &V. Aggression	11.9 (11.0)	15.7 (9.4)	-2.88**
Aggression	15.5 (12.7)	19.5 (11.2)	-2.62**
Test anxiety	25.4 (7.7)	25.5 (6.9)	-.075
Mastery	56.1 (10.7)	51.2 (12.7)	3.48**
Performance approach	32.4 (6.6)	29.9 (8.5)	2.76**
Performance avoidant	26.5 (6.0)	25.6 (7.0)	1.04
Work avoidant	19.6 (4.2)	19.1 (5.0)	1.23
Goal orientation	134.9 (21.6)	126.0 (29.4)	2.94**

*Note : * = p< .05, ** = p < .01, *** = p<.001*

An independent-sample t-test was conducted to compare goal orientation, test anxiety,

and aggression in medical and non-medical students. There was significant difference in scores

of physical and verbal aggression in medical students (*M*=11.9, *SD*= 11.0) and in non-medical

students *(M=15.7, SD=9.4)* condition; t (29) =-2.88**, *p*=.004. The result also shows that

significant physical and verbal aggression is also more in non-medical students than medical

students. Aggression is also more in medical students (*M*=15.5, *SD*=12.7) and non-medical

students *(M=19.5, SD=11.2)* condition; t (29) =-2.62**, p=.009. The other table shows that there

was insignificant difference as the test anxiety is the same in medical *(M=25.4, SD=7.7)* and

non-medical students *(M=25.5, SD=6.9)* condition; t (29) =-.075, p=.94=. Mastery is significant

more in medical students *(M=56.1, SD=10.7)* as compared to non-medical students

(M=51.2(12.7) condition; t (29) =3.48**, p=.001. There was a significant difference in

performance approach in medical students *(M=32.4, SD=6.6)* as compared to non-medical

students *(M=29.8, SD=8.5*) condition; t (29) =2.76**p=.006. That shows that the performance

approach is more in medical students as compared to non-medical students. Performance

avoidance is almost same in medical students *(*M=26.5, SD=6.0*)* and non-medical student

(M=25.6, SD=7.0) condition; t (29) =1.04, *p*=.29. Work avoidant is almost same medical

students (M=19.6, SD=4.2.) and non-medical students *(M=19.1, SD=5.0)* condition; t (29)

=1.23, p=.21 words. Goal orientation is more in medical students *(M=134.9, SD=21.6)* as

compared to non-medical *(M=126.0, SD=29.4)* condition; t (29) =-2.94**, p=.004).

Table 4: *Relationship between goal orientation, test anxiety and aggression*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.Age	-	.11	-.15*	.43**	.05	.00	-.07	-.06	.01	.09	.13	.02	.09	.11
2.Gender	-.04	-	-.07	.33**	.02	.09	-.24**	-.18*	.10	.10	.00	-.08	-.37	.02
3.Family system	.10	-.14	-	-.13	.12	-.10	.14*	.10	-.07	-.08	.00	-.07	-.08	-.07
4. Education	.28**	-.06	.23*	-	-.06	.02	-.30**	-.26**	-.12	.12	.06	-.08	.53	.07
5.Marks in last exam	.19	.14	.00	.25*	-	.05	.24**	.22**	.10	-.01	.04	.00	-.06	-.00
6.Anger	.08	.21*	-.09	-.07	.36**	-	.41**	.60**	.29**	-.08	-11	-.11	-.07	-.12
7.P. &V. aggression	-.04	.06	.20	.07	.31**	.59**	-	-.97**	-.19**	-.37**	-.16*	-.14*	-.09	-.29**
8.Aggression	-.07	.10	.14	.05	.35**	.74**	.98**	-	.24**	-.34**	-17*	-.15*	-.10	-.28**
9.Test anxiety	.10	.11	.08	.09	.17	.40**	.33**	.38**	-	-.13	-.06	.04	-.06	-.09
10.Mastery	.06	-.03	-.09	-.22*	-.32**	-.28**	-.44**	-.44**	-.19	-	.56**	.25**	.44**	.82**
11.Performance approach	.07	-.10	-.06	-.21*	-.21**	-.12	-.27**	-.26*	-.02	.78**	-	.50**	.63**	.85**
12.Performance avoidant	.15	-.05	-.04	-.21*	-.16	-.11	-.26*	-.24*	-.23	.63**	.76**	-	.49**	.65**
13.Work avoidant	.03	-.03	-.12	-.21*	-.27**	-.14	-.26*	-.25*	-.65	.59**	.79**	.73**	-	.74**
14.Goal orientation	.09	-.06	-.09	-.24*	-.28**	-.20*	-.37**	-.36**	-.08	.90**	.93**	.85**	.82**	-

Note : * = $p < .05$, ** = $p < .01$, *** = $p < .001$, correlations for medical students are presented above the diagonal and correlation for non-medical students are presented below the diagonal

Correlation analysis was also calculated for samples of medical students and non-medical students separately as well. For the medical students' results show that gender has a significant negative correlation with physical and verbal aggression *(r=-.24**, p=.01)*, aggression (r=.18**, p=.01). Family system has a significant positive correlation with physical and verbal aggression *(r=.14*, p= .01)*. The study also showed that years of current education in medical students have a significant negative correlation with physical and verbal aggression *(r=-.30**, p=.01)*, aggression *(r=-.26**, p=.01)*. Findings also revealed that marks in the last exam have a significant positive correlation with physical and verbal aggression *(r=24**, p=.01)*, aggression *(r=.22**, p=.01)*. Study also shows that anger has positive significant correlation with test anxiety *(r=.29**, p=.01)*. Result depict also demonstrate that physical and verbal aggression has significant positive correlation with test anxiety (r=19**, p=.01) and negativity significant correlation with mastery *(r=-.37**, p=.01)*, performance-approach *(-.16*=.05)*, performance avoidant *(r=-.14*, p=.05)*, goal orientation *(r=-.29**, p=.01)*.

For the same sample, further findings also illustrate that aggression has a positively significant correlation with test anxiety *(r=.24**, p=.01)*, and negatively significant correlation with mastery *(r=-.34**, p=.01)*, performance avoidant *(r=-.15*, p=.05)*, and goal orientation *(r=-.28**, p=.01)*.

The analysis also indicates that for the non-medical students, gender has positive significant correlation with anger *(r=.21*, p= .05)*. Results also showed that years of current education in non-medical students has significant negative correlation with mastery *(r=-.22*, p=.05)*, performance-approach *(r=-.21*, p=.05)*, performance avoidant *(-.21*, p=.05)*, goal orientation *(r=-.24*, p=.05)*, work avoidant *(r=-.21*, p=.05)*. Findings also revealed that marks in the last exam have a significant positive correlation with anger *(r=.36**, p=.01)*, physical and

verbal aggression *(r=.31**, p=.01),* aggression *(r=.35**, p=.01)* and significant negative

correlation with goal orientation *(r=28**, p=.01).* Results also shows that anger has positive

significant correlation with test anxiety *(r=.40**, p=.01)* and anger has significant negative

correlation with goal orientation (r=-.20*, p=.05), mastery *(r=-.23**, p=.01).* Findings also

demonstrate that physical and verbal aggression has positive significant correlation with test

anxiety *(r=.33**, p=01)* and negativity significant correlation with mastery *(r=-.44**, p=.01),*

performance-approach *(-.27**, p=.01),* performance avoidant *(r=-.26*, p=.05),* work avoidant

(r=-.26*, p=.05), goal orientation *(r=-.37**, p=.01).*

For the non-medical students' further findings also illustrate that aggression has

positively significant correlation with test anxiety *(r=.38**, p=.01),* and negatively significant

correlation with mastery *(r=-.44**, p=.01),* performance-approach *(r=-26*, p=.05)* performance

avoidant *(r=-.24*, p=.05),* work avoidant *(r=-.25*, p=.05),* goal orientation *(r=-.36**, p=.01).*

Table 5: *Standardized Regression Weights Predicting Aggression from Goal Orientation*

Measures	Medical students		Non-medical students	
	M1	M2	M1	M2
Education	-.03	-.09	-.25***	-.23***
Marks	.36**	.28**	.21**	.21**
Goal orientation		-.30**		-.27***
Model fit	$F= (6.51)$	$F= (7.9)$	$F= (12.8)$	$F= (15.1)$
R^2	.12	.20	.11	.18
ΔR^2	.10	.18	.10	.17
Incremental R		.08		.07

*Note : * = p< .05, ** = p < .01, *** = p<.001*

In this section, moderation models were analyzed by running stepwise regression analysis. In the first regression model of medical students, demographic characteristics *(e.g., education and marks)* were entered, which revealed marks as a positive significant predictor *(β= .36**, p<.01)*. In model 2, when entered, goal orientation it showed the significant (*β= -.30**, p<.01)* and incremental R as 7%, which indicated significant moderation.

In the next regression analysis was in non-medical students shows when aggression entered as predictor, model 1 indicated that demographic variables, education has significant predictor *β= -.25*** p<.001)* marks (*β= 21**, p<.01).* In model 2, the education is highly significant (*β= -.23*** p<.001)* the goal orientation it also showed a highly significant (*β= -.27***, p<.001)* and incremental R as 8%, which indicated significant moderation.

Chapter 5

Discussion

The cross-sectional study was used to determine the goal orientation, test anxiety, and aggression in medical and non-medical students. Independents sample t-test and regression analysis were used. This part of the study describes the results of this research compared to other empirical research and theoretical justifications.

This study's first hypothesis was that goal orientation is negatively correlated with aggression and positively correlated with test anxiety. The findings of this study support this hypothesis as aggression has a significant negative correlation with goal orientation and positive significant correlation with test anxiety. Students who are highly testing anxious are likely to be women who endorse avoidance goal orientations and are maladaptive perfectionistic. This study is conducted by (KoUn & Kenneth, 2011).

The study's second hypothesis was that goal orientation, test anxiety, and aggression likely to vary in medical and non-medical students. The study's result supports the hypothesis yes goal orientation, test anxiety, and aggression vary in medical and non-medical students. Means differences among participants revealed that medical students have more goal orientation and test anxiety than non-medical students. The Independent sample t-test for formulated on sample shows that aggression is significant greater in non-medical students while, goal orientation is greater in medical students Male students had higher levels of innate goal orientation than their feminine equivalents. There were no major changes between students from various research programs on intrinsic goal alignment, intense and meta-rational knowledge tactics. (Ngwira, 2017).

There is likely to be relationship between obtained marks and aggression in medical and non-medical students. Linear regression analysis revealed that aggression, marks and educations are the predictor of goal orientation, however aggression was found to be stronger predictor of goal orientation. The level of aggression has more in non-medical students as compared to medical students. Study revealed that aggression had significant negative effect on student's current educational accomplishment and cumulative educational accomplishment (Uludag, 2013). A study on goal orientation in Medical students is typically intrinsically inspired to master target orientation. The goal-oriented evaluation method operated in research included genius, execution-method execution-evasion, and effort-prevention elements to explain medical students' method to their educations. Male students are typically more performance-oriented, whereas female students are more mastery-oriented.

Similarly, Grade Point Average (GPA) students demonstrate higher degrees of mastery and success orientation (Kool et al., 2016). Numerous justifications such as university trauma, new neighborhood relative, and altering life cycle environments could boost the pupils' forceful performances. It is also shown that pupil hostility would be linked with the type of college and teaching stage. This survey is designed to assess potential relationships between scholars' hostility and their individual, clan, and collective traits. Many non-medical students want to be doctors due to financial issues and other reasons they failed to pursue a doctor career. That is why they have high aggression compared to medical students.

Demographic characteristics likely relate to goal orientation, test anxiety, and aggression in medical and non-medical students. The regression analysis of marks and years of education is quite interesting in terms of findings i.e educations has no significant correlation with medical students. And highly significant in non-medical students. On the other hand, hand marks in the

last exams have the same positive significant correlation in both medical and non-medical students. The study's main finding indicated that medical students had similar quality of life perceptions to non-medical students except concerning the environment domain. (Hennin et AL., 2014). The stress levels of undergraduate non-medical students are higher than those of undergraduate medical students in Rawalpindi and Islamabad's colleges and universities. There is a need for appropriate measures to be taken by the undergraduate non-medical students and the institutions where they study to ensure a decline in these students' stress levels, which is necessary for their better functioning (Safdar., et al. 2018).

Conclusion

Goal orientation, test anxiety, and aggression are psychological problems seen to be affecting students. This research serves as a baseline in filling the knowledge gap. Literature suggests that the phenomenon has been explored with different psychological variables. However, to fill the knowledge gap, this study was carried out to determine the goal orientation, test anxiety, and aggression in medical and non-medical students. The study concluded that medical students have higher goal-oriented and test anxiety and lower aggression than their counterparts. The results suggested that goal orientation has negative significant correlation with aggression and has positive significant correlation with test anxiety in non-medical students. This study showed that aggression is significant greater in non-medical students while, goal orientation is greater in medical students. Also revealed that aggression, marks and educations are the predictor of goal orientation, however aggression was found to be stronger predictor of goal orientation. This study can contribute in acknowledging the comparison between medical and non-medical students using present variables and more variables.

Thus, medical students must be offered proper treatment and comfortable easing actions to avoid the long-term incompatible consequences of higher pressure amounts on upcoming doctors' bodily and psychological wellbeing.

Limitations and Future Suggestions

The researchers aimed to proceed in the best possible way; however, different barriers were encountered. The study included small sample size and narrow age range due to which the findings cannot be generalized to the entire medical and non-medical students of Pakistan. During the Covid-19 times, data collection was the toughest part of this research. It was not possible to visit universities for data collection because all institutes were closed throughout the year. Otherwise, results could have been generalizable if sample sizes increased.

Another limitation for this study is the lack of authentic response from participants as most of the people were facing the disturbance phase of their lives due to Covid-19. Mostly, participants did not find it interesting to fill the online form as they reported boredom even though it required their 5-10 minutes. Researchers' physical absence can also be a limitation for this research because not a single participant asked anything even if they get confused regarding items of the scales. There can be individual differences that can lead to a lack of desired responses.

In future this study can be analyzed using other psychological variables and demographic such as socio-economic status. Results of this study revealed interesting findings giving insight into the need of such participants as well concerning their goal orientation, test anxiety, and aggression. Suppose such variables are explored in the future. In that case, it will be very helpful for researchers to fill the knowledge gap concerning differences in goal orientation, test anxiety, and aggression in. medical and non-medical students concerning their demographic

characteristics. The said phenomenon is understudied in Pakistan regarding multiple aspects, and research needs to focus attention on the correlation and, in turn, help them design appropriate interventions.

Chapter 6

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Appendices

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<u>**Department of Humanities**</u>

To Whom It May Concern

Subject: Permission for Online Data Collection

Respected Sir/Madam,

      I Dr. Farzana Ashraf, Department of Humanities, COMSATS University Islamabad, Lahore Campus asserts that Ms. Kainat Fatima is conducting a research under my supervision (as a part of her BS Psychology final project). The Study is Entitled "Goal Orientation, Test Anxiety and Aggression in Medical and Non-Medical Students". For this purpose, she needs to collect online data from students of different Universities/ Collages. It is ensured that all acquired information will be kept confidential and collected raw data will be used for research purpose only. So, permission for online data collection is granted to her.

Dr. Farzana Ashraf   **Dr. Shameem Fatima**

                                         In-Charge Humanities
Assistant Professor   Assistant Professor
Department of Humanities   Department of Humanities
CUI, Lahore Campus   CUI, Lahore Campus

Informed Consent

Thesis Supervisor, **Dr. Farzana Ashraf**

I, **Kainat**, am the student of BS psychology and this research is part of my thesis. Topic of my thesis is "**Goal Orientation, Test Anxiety and Aggression in Medical and Non-Medical Students**". Before you decide to participate in this study, it is important for you to know why this research is being done with will be involved in this.

Purpose of this research

This research is being done to know the goal orientation, test anxiety and aggression in medical and non-medical students. This research will only include questionnaires, no interviews or audio recordings.

Guidelines (Please tick):

1- I confirm that I have been informed about the nature of the research and I had opportunity to ask ☐ questions. ☐

2- I understand that it is my choice to participate in this research.

3- I understand that the responses recorded will remain strictly confidential. ☐

4- I understand that my personal information will only be used for the purpose of ☐ research.

5- I was given a right to withdraw from the research whenever I want to. ☐

6- I was given sufficient time to fill this questionnaire.

Participant's Signature_____ **Date**_____ **Researcher's**

Signature_____ **Date**_____

You can contact on kzaffar023@gmail.com for further information.

Personal Information

1. Age_____

2. Gender_____

3. Family System--Joint/Nuclear

4. Name of College/University_____

5. Years (Current Education) _____

6. Mode—Medical/Non-Medical

7. Marks in last exams_____

Statements	Very untrue	Mostly untrue	Somewhat untrue	Somewhat true	Mostly true	Very true
1- I challenge myself with goals for a test based on my past exam results.	1	2	3	4	5	6
2- I believe that if one does not try hard in a class, but still does well, they must be smart.	1	2	3	4	5	6
3- I am more concerned with improving form week to week than I am in doing better than others in the course	1	2	3	4	5	6
4- I am afraid that if I ask the instructor for help they may not think I am very smart.	1	2	3	4	5	6
5- I want to do as little work as I have to in this class.	1	2	3	4	5	6
6- It is important for me to do well compared to others in this class.	1	2	3	4	5	6
7- Even when I am doing well in this course I continue to work hard to improve my understanding of the material.	1	2	3	4	5	6
8- In this class I prefer material that arouses my curiosity, even if it is difficult to learn.	1	2	3	4	5	6
9- I feel that effort that leads to improvement increases my ability.	1	2	3	4	5	6
10- When others as how I did on test or assignments in this course I often lie and say I did better than I actually did.	1	2	3	4	5	6
11- I believe that intelligence is something you are born with.	1	2	3	4	5	6
12- I want to do well in this class so that my friends, family, instructor, and others will recognize my ability.	1	2	3	4	5	6
13- When test or assignments are returned in this course I do not want others to know how I did.	1	2	3	4	5	6
14- My goal in this course is to do my best, even if others are doing better.	1	2	3	4	5	6
15- I often worry about doing poorly in this class.	1	2	3	4	5	6
16- When exams or assignments are returned in this class I immediately want to compare my scores to others in this course.	1	2	3	4	5	6

17- I worry more about getting a bad grade than I do about understanding the material.	1	2	3	4	5	6
18- I try to improve my test and assignment scores throughout the semester.	1	2	3	4	5	6
19- I feel that one can increase their mental abilities through effort.	1	2	3	4	5	6
20- If I know I am getting an A in a class without much effort I will slack off.	1	2	3	4	5	6
21- I like my classes best when there is not much to learn.	1	2	3	4	5	6
22- Getting a good grade in this course is more important than understanding the material covered.	1	2	3	4	5	6
23- I just want to do as much as I have to in order to get by in this class.	1	2	3	4	5	6
24- I feel that if someone tries hard in class, but does poorly, they are not very intelligent.	1	2	3	4	5	6
25- My only goal for this course is to get the best grade in the class.	1	2	3	4	5	6
26- I will try my best for every exam even if I know I do not need to try hard for a good grade.	1	2	3	4	5	6
27- Doing well on an exam or assignment encourages me to do even better the next time.	1	2	3	4	5	6
28- My primary goal in this course is to avoid getting a bad grade.	1	2	3	4	5	6
29- Understanding the content of this course is more important than just getting a good grade.	1	2	3	4	5	6
30- I am more interested in doing better than the other students in this class, than doing my best.	1	2	3	4	5	6
31- In this class I prefer material that challenges me.	1	2	3	4	5	6
32- I am more concerned with doing my best than doing better than others.	1	2	3	4	5	6
34- I feel that having to try hard to do well in a class is evidence of lack of ability.	1	2	3	4	5	6

Statements	Never	Rarely	Sometimes	Often	Always
1- I have visible signs of nervousness such as sweaty palms, shaky hands, and so on right before a test.	1	2	3	4	5
2- I have "butterflies" in my stomach before a test.	1	2	3	4	5
3- I feel nauseated before a test.	1	2	3	4	5
4- I read through the test and feel that I do not know any of the answers.	1	2	3	4	5
5- I panic before and during a test.	1	2	3	4	5
6- My mind goes blank during a test.	1	2	3	4	5
7- I remember the information that I blanked on once I get out of the testing situation.	1	2	3	4	5
8- I have trouble sleeping the night before a test.	1	2	3	4	5
9- I make mistakes on easy questions or put answers in the wrong places.	1	2	3	4	5
10- I have difficulty choosing answers.	1	2	3	4	5

Statements (During last 7 days)	0 times	1 time	2 times	3 times	4 times	5 times	6 times
1- I teased students to make them angry.	0	1	2	3	4	5	6
2- I got angry very easily with someone.	0	1	2	3	4	5	6
3- I fought back when someone hit me first.	0	1	2	3	4	5	6
4- I said things about other kids to make other students laugh.	0	1	2	3	4	5	6
5- I encouraged other students to fight.	0	1	2	3	4	5	6
6- I pushed or shoved other students.	0	1	2	3	4	5	6
7- I was angry most of the day.	0	1	2	3	4	5	6
8- I got into a physical fight because I was angry.	0	1	2	3	4	5	6
9- I slapped or kicked someone.	0	1	2	3	4	5	6
10- I called other students bad names.	0	1	2	3	4	5	6
11- I threatened to hurt or to hit someone.	0	1	2	3	4	5	6

Title	**Goal orientation, Test anxiety and aggression in medical students and non-medical students**

Author	**Kainat Fatima**

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