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A Survey of Culture and Tax Compliance in Sub-Sahara Africa: Nigerian Perspective

Asaolu, Taiwo, Agbetunde, Lateef Ayodele

Abstract—This study examined culture and tax compliance of individual taxpayers in Nigeria, a Sub-Sahara African country. Data were collected in a survey of Nigerians through a self-administered questionnaire on taxpayers from two purposively selected states from each of its three major cultural groups; Hausa, Igbo and Yoruba. Hofstedes' cultural dimensions were used to analyse the respondents' characteristics, while process definition of tax compliance was adopted in drawing proxies to measure tax compliance. A total of 1,200 respondents were randomly selected for the study. Data were electronically processed and analysed with SPSS 23 software using parametric and non parametric statistics. Results revealed that, generally culture exerts significant influence on tax compliance of individual taxpayers in Nigeria and that each of the Hofstede's cultural dimensions is found to show strong influence on tax compliance. Specifically, each of "power difference", "masculinity" and "uncertainty avoidance" dimensions is found to have positive influence on tax compliance but "individualism" dimension showed negative influence on tax compliance. The study also established significant relationship between some tax compliant factors and each of the cultural dimensions testifying that some policy implication findings were established in the result. From these findings, the study recommended policy formulation strategy considered appropriate for each tax jurisdiction based on its dominant culture, which if adopted would tremendously assist in ensuring effective taxation in Nigeria as well as other tax jurisdictions with similar cultural features.

Keywords—Tax compliance, culture, Hofstede cultural dimensions, tax compliance determinants, Sub-Sahara Africa.

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Proposed Business Strategies to Increase Awareness of Millennials to Invest in InvesProperti.ID

Basytyan Kardinal Pratama, Dwi Larso

Abstract—*InvesProperti is one of the promising Fintech start-up companies that aims to make property investment accessible to everyone using the crowdfunding mechanism. It is easy to use, affordable, starting from 1 million rupiahs per slot, lucrative return of investment and based on Sharia compliance. The internal condition is analyzed by STP focusing on millennials as the prime market, age 25-40 years old who interested in investment opportunity and BMC analysis which mapping InvesProperti activities process.*

After getting understanding of InvesProperti current condition, Root Cause Problems Analysis, TOWS Analysis by combining SWOT Analysis and Macro Environment Analysis is also analyzed to identify, prepare InvesProperti's strengths which are easy, low risk, high return investment and strong domain expertise by the founders in the industry; overcome the weaknesses; find the opportunities and define new strategies to answer why millennials are not investing their money through InvesProperti. The analysis was conducted to find out what should be done by InvesProperti to develop the business and meet the market fit. And from all those analysis author can describe the further step in developing InvesProperti promotion and branding awareness strategies to millennials.

Therefore, there are several strategies that can be done by InvesProperti to attract millennials, which are educating them about the importance of investment as early as possible especially in the property industry through InvesProperti's community channel, attending several events such as exhibition and startup competition to get trust and improve brand awareness, developing good product based on the customer's feedbacks, maintaining and optimizing the channels that InvesProperti has through social media and e-mail marketing to engage the customers about the product.

Keywords—Fintech, Macro Environment Analysis, Porter Fives's Forces Analysis, Property Crowdfunding, SWOT-TOWS Analysis.

I. INTRODUCTION

THIS idea began when the author studied at Postgraduate school in Business Administration ITB at 2017. The author has interest in IT and Real Estate industry. His vision is to make the people get financially better by creating property investment accessible to everyone. Basyt believes the Real Estate industry can give big contribution for the national Economy and Social development.

As we know that real estate investment is very interesting topic to discuss, because this sector has higher ROI than most other investments such as bank deposits, gold and mutual fund. Deposits give 6% return annually, while gold 9%, and mutual fund around 10 - 15% (Detikfinance & Bareksa). Another hand, property could give ROI above 20% annually (Tempo).

Investing in real estate is one of the traditional, oldest, most tangible forms of investment, which has existed since the early days of human civilization. From Basyt's experiences as the real estate agency and developer, he found that as its core, many people interested and wanted to invest in the real estate industry. But the problems are many of them didn't have enough money to invest which needs large capital requirements, lack of education, skill and knowledge which property investment is profitable and safe? And lack of the time to manage their property assets.

Based on KPMG report on Investing in Indonesia 2015, Indonesia is one of the countries with large domestic consumption base. From 2003 to 2010, Indonesia's middle class with increasing levels of disposable income and purchasing power has grown from 81 million (38% of the population) to 131 million (56.6% of the population). Besides, the World Bank claimed that there was 61.73% growth in the number of the middle class during a 7-year period and over 7 million people being elevated to the segment.

Indonesia was ranked the world's 16th largest economy with GDP of USD978 billion in 2014 or IDR10,542.7 trillion with GDP per capital IDR41.8 million (USD3,532). Predictions are for Indonesia to be the 7th largest economy in the world by 2030 provided economic growth rates can be achieved by fully taking advantage of the rapidly expanding consumer class, which includes maximizing the country's attractiveness for foreign investment.

As a platform that enables everyone to invest in real estate industry without using a lot of capital by using the crowdfunding mechanism, InvesProperti allows everyone to contribute to Indonesia Economic and Social development while at the same time gaining extra passive income. InvesProperti.id is crowdfunding platform for property investment. By using this platform, anyone can invest in property start from only 1 Million rupiahs ($75). We believe using technology and crowdfunding system will help anyone to get benefits from investment in the property sector.

The idea of property crowdfunding is still fresh idea in Indonesia. This fact alone helps InvesProperti to attract investors to invest in the company. Moreover, InvesProperti is actively participating and winning some competitions across SEA region, hence increasing InvesProperti exposure to potential investors or the market.

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Idea-wise, there seem to be no problem, at least for now, as the idea of InvesProperti has been validated after multiple times winning national-level and international-level competitions, and given insights from many experienced experts in the industry. However, succeeding as a start-up is much more than the idea. Apparently, most millennials seem to be uninterested about investing in crowdfunding, especially in InvesProperti. This elevates the concern level of the management team of InvesProperti about how to dominate the millennials market in this industry.

II. METHODS

The conceptual framework is a form of framework that can be used as an approach in solving problems. This research framework uses a business approach, strategic formulation and shows the relationship between variables in the analysis process with the current state to build and generate suitable business strategic. The information and data used are based on internal and external factors by InvesProperti. The research method used is the interviews session with the company's founder and review of some company internal documents. The conceptual framework of InvesProperti will be described in the Figure below.
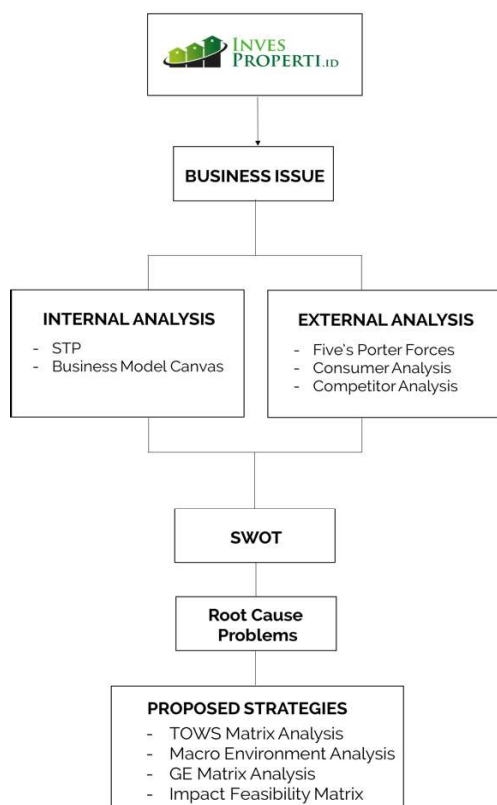
Fig. 2.1 Conceptual Framework

According to Fig. 2.1, the conceptual framework is used as a guideline to analyze the condition of the company. It is started with the internal and external analysis. In internal analysis involves all internal elements of the company. Variables that used are STP and Business Model Canvas. Meanwhile, external analysis involves all external elements that relevant to a firm. Variable that used are Five Porters Analysis, Consumer Analysis and Competitor Analysis. The next step is conducted SWOT Analysis, a directs strategy analysis by focusing on strengths, weaknesses, opportunities and threats that are critical to the success of the company. After that, the deep understanding of the company issues and condition is analyzed using Fishbone diagram in Root Cause Problems Analysis.

With the data gathered from STP, Business Model Canvas, Fiver Porter's Forces, Consumer Analysis, and Competitor Analysis, the current position of InvesProperti can be defined to create and propose the strategies using some tools such as TOWS Matrix Analysis, Macro Environment Analysis, GE Matrix Analysis and Impact Feasibility Matrix. The main goal is to get a detail strategy which can be implied to business solution. The business strategy conclusion explains what strategies are related to company strategy and business strategy.

A. Internal Analysis

In this phase will discuss about internal condition of InvesProperti and breakdown all of internal condition using Segmenting, Targeting, and Positioning (STP) and Business Model Canvas (BMC). The STP analysis is basically used to position a brand of the company in the minds of customers in such a way that the brand has a sustainable competitive advantage. Meanwhile, the Business Model Canvas is mostly related to know how the company make money business process, the detail of the company condition, what are the activities that the company done, what is the channels that company used, etc.

B. STP Analysis

The STP marketing strategy (Segmenting, Targeting, and Positioning) is a series of three processes that must be passed on determination of business strategy. It applies to various types of products both goods and services, as well as the marketing ways both offline and online.

The STP analysis is a tool to align the product or service with the right customer. It is helpful when creating marketing communication plans because it helps marketers to prioritize propositions, develop and deliver personalized and relevant messages to engage with the different audiences (Hanlon, 2017).

Market segmentation is the process to identify and classify meaningfully different groups of customers. Market segmentation is a very important strategy in developing marketing programs for the company, it is expected that marketing efforts can achieve the company's goals efficiently and effectively.

Segmenting is an attempt to map the market by sorting out consumers according to the similarities between them. A market segment consists of consumers who respond in a similar way to given set of marketing efforts (Kotler, 2014). In segmenting the market used several variables that are Geographic, Demographic, Psychographic and Behavioral segmentation.

TABLE 2.1
INVESPROPERTI CUSTOMER TARGET

	Geographic	Demographic	Psychographic	Behavioral
Crowd-Investors	Place: Indonesia Population density: Urban, Sub-Urban	Age: 25-40 years old (Millennials and late Millennials) Gender: All genders Income: 5 million rupiahs per month and above Education: Undergraduate, Graduate Occupation: Students, Young Professional, Office Workers, Entrepreneur, General Investors	Social class: middle-up class Personality: Ambitious, Risk taker, Achiever, Open mind, Curiosity, Spontaneous, Growth mindset Activity: working, doing business	Lifestyle: Open mind with the investment opportunity, tech savvy
Property Developers	Place: Indonesia	Operate more than 3 years, good reputable	Like challenge, Professional,	

Based on the table above, we can see that the customer target of InvesProperti is mostly the Millennials and late Millennials who have disposable income. Specifically, InvesProperti focused to target people who have income more than IDR 5 Million (USD 360), age between 25-40 and informed on investment opportunity. Based on the data from BPS, the number of Millennials in Indonesia was 90 million people, and 80% of Indonesia millennials having disposable income more than IDR 5 Million. To put it into number, the potential market share was 80% out of 90 million people times IDR 1 million (investment amount), which equal with IDR 72 Trillion (USD 5.2 Billion).

The positioning that InvesProperti set is to Millennials in age group 25-40 years old, InvesProperti.id is a crowdfunding platform that can be accessed anytime, anywhere, by anyone with promising benefit in property investment.

C. Business Model Canvas Analysis

A business model describes the rationale of how an organization creates, delivers, and captures value (Osterwalder and Pigneur, 2010:14). BMC consists of 9 main pillars that summarize business process ranging from company values, customer segments, financial cost, key partners, key activities, key resources, revenue streams, customer relationship and channels. With these nine blocks, we can actually validate whether a business idea is potential or not. In InvesProperti this model will explain the whole business process from the beginning to the end. As we can see in the Table 2.2 below all the activities and process that InvesProperti did.

Table 2.2
InvesProperti Business Model Canvas

Key Partners:	Key Activities	Value Proposition	Customer Relationships	Customer Segments
• Association (Property Developer Association, Fintech Syariah Indonesia Association) • Property Agency • Property Management • Developer • Public Figure • OJK	• Promotions • Partnership with developers, community, agency and public figure • Manage property (renting, maintenance, selling) • Partnership with developer **Key Resources** • Experienced team in startup and property sector • Technology • Financial	**Crowdfunding for property unit:** *Investor:* • Property investment has higher ROI than most other investment (Deposito, Reksadana, Emas) • Easy and secure • Only need small amount of money to invest (1 Juta Rupiah) *Developer seller:* • Alternative way to sell their property **Crowdfunding for property developer project** *Investor:* • Require 10 juta rupiah to start • Invest on property project without involve directly on the details • Bigger ROI than property unit investment but higher risk *Developer:* • Alternative funding for small-medium developer	• Customer support • Investment education for potential customer • Monitoring and evaluation for developer **Channels** • Social media • Website • Mobile app • Community and event • Investor Gathering	*End User (Small investor)* • Familiar with online transaction • age between 25-40 • Income higher than 5 juta • informed by investment opportunity *Big Investor* • Large investor who want to invest in property business • Endowment fund *Developer* • Small to medium property developer
Cost Structure • Partnership Development • Marketing • Staff Salary • Platform development (website and app)			**Revenue Streams** • Fee 5% upfront • Fee 5% for selling	

Business Model Canvas (BMC) is a visual representation tool to explain and help us understand a business model in a straightforward and structured way comprehensively.

D. External Analysis

The external environment is an important factor that needs to be reviewed every detail in determining a decision. The

understanding of various conditions and its impats is an absolute thing that must be explored further. External analysis can be components or environmental variables originating from outside the organization or company that the company cannot control, but can anticipate what is possible to happen. The details of the External Analysis of InvesProperti are explained as follows:

E. Porter's Five Forces Analysis

The company situation currently on struggling to compete with other crowdfunding platforms. Judging from the table above, InvesProperti's competitors have better revenues than the company, with strong brand awareness and likely same services to offer. figure below is explained the detail about InvesProperti Porter's Five Forces
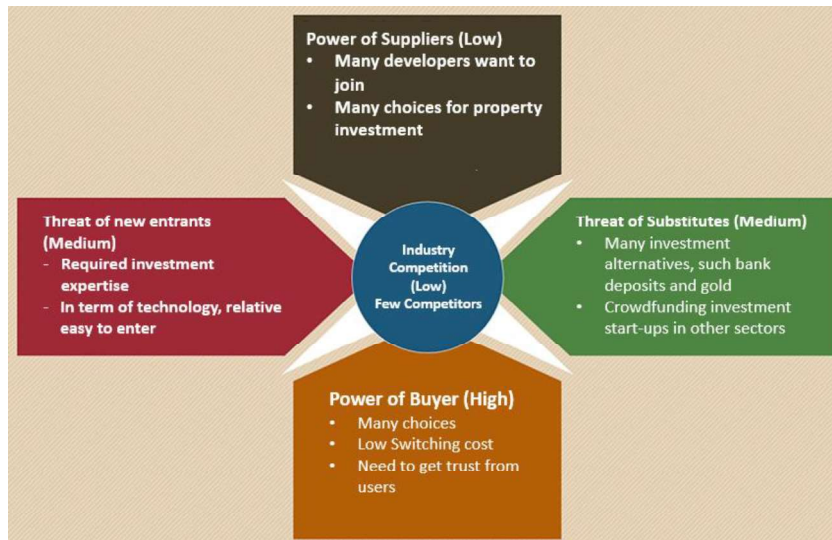
Fig. 2.2 InvesProperti Porter's Five Forces

As can be seen in figure above, InvesProperti considered in the medium level in threat of new entrants and threat of substitutes. For threat of new entrants because it requires investment expertise as main domain. Threat of substitutes is in the medium level same with new entrants is because many investment alternatives out there to substitute InvesProperti's product and their brand is also widely known. Low level for bargaining power of suppliers because there are many developers want to join and collaborate with InvesProperti to get fund for their property projects, and high level for bargaining power of buyer's there are some big companies in the market and new entrances option for customer to choose their investment platform.

F. Consumer Analysis

In this case, Consumer Analysis is done to know how consumer awareness of InvesProperti brand, how consumer behavior to investment, whether the STP (Segmenting, Targeting, Positioning) formulated by InvesProperti is right, and how consumer perception or potential consumer against InvesProperti brand. To obtain data in Consumer Analysis, the researcher uses questionnaire distributed.

G. Competitor Analysis

In the business industry, the existence of the competitors is necessity. Competitors can be defined as other entrepreneurs or companies who offer products/services that are the same as the products/services we offer to consumers. On other words, it can be explained as companies that produce or sell goods and services that are identical or similar to the products offered. The purpose of doing competitor analysis is to know the comparative position of our company with competitors and review our competitive advantage against them.

We can learn or adapt what has been done by competitors that can impact on our company. In this study used some kinds of competitors namely Propertree, iGrow, Amartha and Growpal. All brands are used for selling similar concept of "crowdfunding platform".

Below is the figure of InvesProperti competitive landscape that selecting two values to be compared to the existing competitors, which are return of investment and investment risk.

Fig. 2.3 InvesProperti Competitive Landscape

As we can see on the competitive landscape above, the stock market is experiencing the highest return indeed, but it equals with the highest risk as well. While for Amartha, iGrow and Growpal provide medium risk and return. Not much different

from Propertree, InvesProperti is offering the low risk and high return investment.

H. SWOT Analysis

SWOT Analysis is a strategy technique in evaluating strengths, weaknesses, opportunities and threats. The main purpose of SWOT Analysis is to combine the four factors precisely on how to prepare for strengths, overcome weaknesses, find opportunities, and strategies to cope with multiple threats.

SWOT Analysis can be applied by analyzing and sorting out various things that affect the four factors, then applying them in SWOT matrix image, where the application is how strengths are able to take advantage of existing opportunities, how to overcome weaknesses which prevents the existing opportunities, then how strengths are able to deal with existing threats, and finally how to overcome weaknesses that are able to make threats become real. The SWOT analysis of InvesProperti will describes in the Fig. 2.4 below.

	Helpful to achieving the object	Harmful to achieving the object
Internal attributes	**Strengths** • Practical and Easy • Low capital requirement • Low risk, high return • The founders have expertise in property and IT Sectors • Member of the largest Indonesia Property Developer and Sharia Fintech Association	**Weaknesses** • Limited projects option • Low market engagement • No legal structure explanation • Required adequate resources promoting to mass market • Need time to build trust • Need legal expert to minimize risk
External attributes	**Opportunities** • Publicized by various renowned media • The market size and growth is great • Property crowdfunding is fresh idea in Indonesia • Property crowdfunding start-up is already billion dollar business in US, it can be the next big thing in SEA • Partnership with external parties • Housing for middle or lower segments are being developed	**Threats** • People in Indonesia mostly buy property to live in, especially age 20-39 years old • Low liquidity • New competitors • The regulation for equity crowdfunding still not available in Indonesia (on process)

Fig. 2.4 InvesProperti SWOT

Internally, the main strength of InvesProperti is it allows investors to invest in property, which is rather safe yet offer high return, without big amount of capital, thus enabling investors diversify their investment portfolio. However, currently the property projects available in InvesProperti are still limited, and we don't have a clear legal structure explanation in the website. On top of that, the market engagement is rather low as we haven't brand our product strongly.

To improve market engagement, we might consider having partnership with property agency group may offset one problems that developers still prefer property agency groups will definitely improve market engagement since the property agencies are the ones who are actively looking for and interacting with the buyers.

Other option is to do social media promotion through micro-influencers. Why? According to the data science team of TapInfluence, a campaign started by 30 micro-influencers result in higher participation rate and lower CPE (Cost Per Engagement) than a campaign by 3 micro-influencers, in which the CPE is rather hard to predict and inconsistent. Moreover, micro-influencers are usually focusing on certain type of product/service, thus they have a follower-base that are interested in certain product/service, therefore if we pick the correct micro-influencers, it can be very cost-effective way to engage to the market.

Besides the internal condition, we have to also take deep consideration some relevant external factors. The biggest opportunity for InvesProperti is that recently, many developers have started developing house for middle or lower segments.

Based on survey from Rumah.com Property Affordability Sentiment Index H1-2018, most people in Indonesia, especially millennials, are buying property to live in, not merely as a source of passive income. 69% of people aged 20-29 are looking for their first house, compared to only 12% who are seeking investment opportunity. As for the older millennials group, only 21% of people aged 30-39 are looking for investment opportunity. On top of that, we all know that property sector is very illiquid, this might be one reason that cause investors not wanting to invest in InvesProperti despite the appealing benefits.

Moreover, InvesProperti has been publicized by various renowned media, such as Pikiranrakyat, Tribunnews.com, Kapanlagi.com, Merdeka.com, TheNextDev Telkomsel, etc. These obviously improve InvesProperti exposure to people who are seeking a way to invest in the lower end property. Figure below is one of the media exposures that InvesProperti had when followed the competition by Telkomsel.
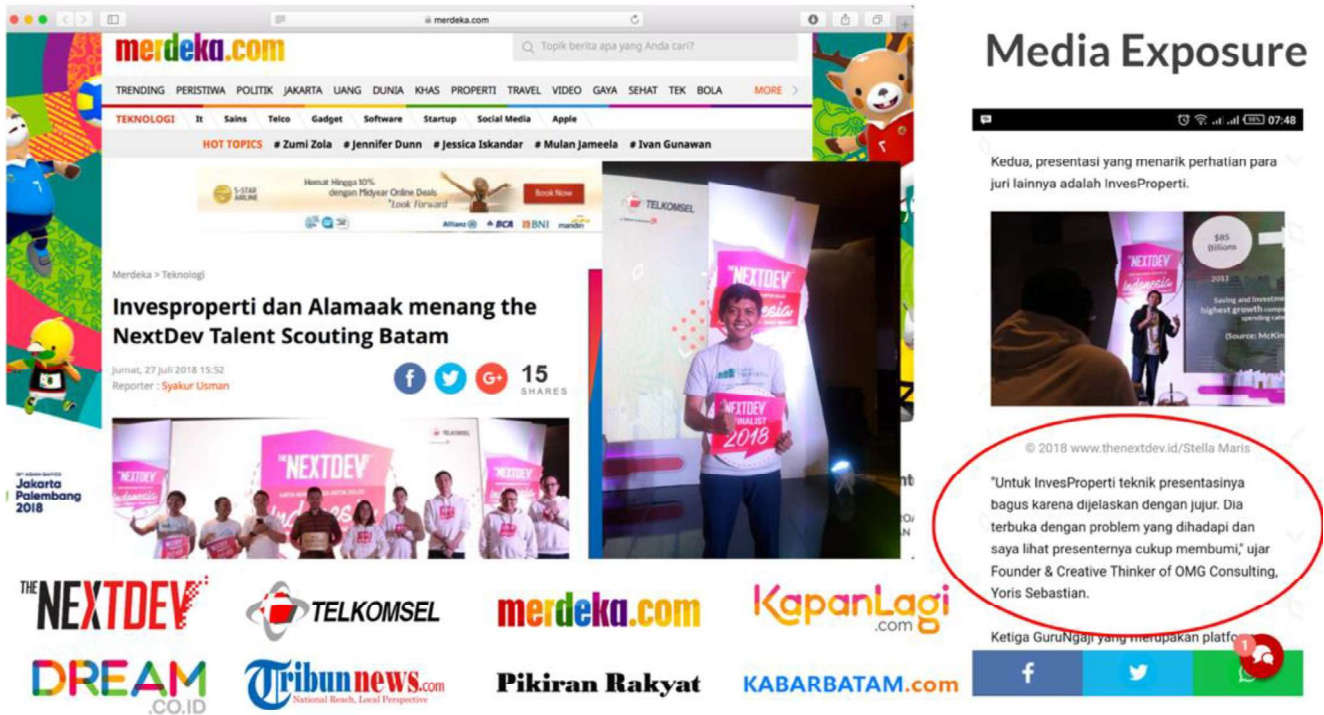
Fig. 2.5 InvesProperti Media Exposure

Although it is still relatively new, InvesProperti has won several competitions locally and internationally, such as TheNextDev 2018 (by Telkomsel), Idealogy and Bandung's Startup Pitching Day 2018 (by TheGreaterHub and Alpha JWC Ventures), Appcelerate 2018 by LPIK ITB collaboration with Lintas Arta which shows our business potential. And selected as Top 20 Digitaraya powered by Google Developers Launchpad, Top 100 Startup Istanbul 2018 - selected among 93.200 startup applications from 140 countries, Top 15 TBIG CreatiON 2018 by Tower Bersama Group, Top 30 (Finalist) Selangor International Pitch and Top 100 company to join StartupSchool by YCombinator USA. Fig. 2.15 is the detail list of InvesProperti's achievements.

i. Root Cause Problems Analysis

Before determining the best solution, a through problem definition process is required to ensure we are working to solve the right problem. The main problem is why millennials are not investing in InvesProperti. First of all, we need to do a root cause analysis so we can decide what needs to be fixed, hence

formulate a solution effectively. To analyze the root cause neatly, we are going to use the fishbone diagram.

A fishbone diagram also called a cause and effect diagram or Ishikawa diagram is a visualization tool for categorizing the potential causes of a problem to identify its root causes. (Rouse, 2014).

As illustrated in Fig. 2.6, the reasons millennials are not investing in InvesProperti can be grouped into 3 small branches; products, marketing and supplier. Millennials are prioritizing their personal value and safety guarantee before using a product or a service, in this case we are trying to sell both product (the house listed in the website) and service (our platform or system). If we want them to invest in a house, we have to provide information about the house like what's unique about the house so they are more willing to spend their money to InvesProperti.

Additionally, the legal structure is not clearly explained in the website. Similar to food and the labels, customers are more likely to use the service if the legal statement is clearly provided. So, they can see, compare, analyze and review whether the company is legal or not.
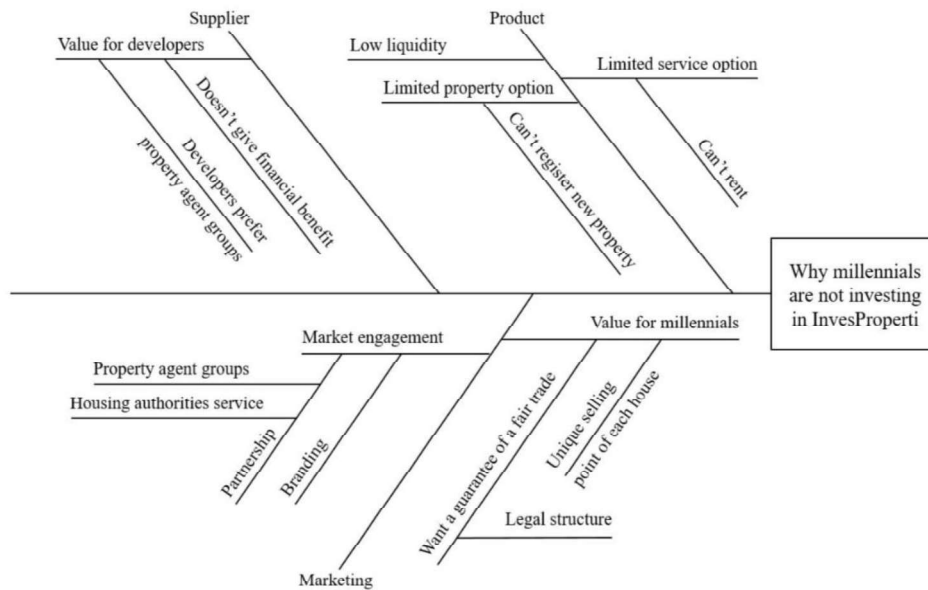
Fig. 2.6 InvesProperti Fishbone Diagram

One of the current limitations in InvesProperti is the property option. Users can't register a new property project to be funded, this results in the low number of property listed in the website and are not enough to attract many users. On contrary, InvesProperti encourage developers to list their property, however currently the value given to the developers aren't that lucrative, hence discouraging developers to list their products in InvesProperti, and rely on property agency groups more. In addition to that, there are no option where the crowdfunded property could be rented.

Besides the product, the whole marketing process also has to emphasize values that are aligned to the millennials to attract them. Currently, InvesProperti lacks partnership with external parties that may give us extra market engagement, or haven't really focus on building a strong brand.

III. RESULTS AND DISCUSSION

A. TOWS Analysis

TOWS Analysis is an advanced tool used to develop 4 types of strategy choices: SO, WO, ST and WT. The key to the success of using the TOWS matrix is to bring together internal and external key factors to form a strategy. We can get detail objective and competitive advantages about new way to prevent, achieve, increase, develop, and eliminate things that we can do. We can see the matrix in the Table 3.1 below.

TABLE 3.1
INVESPROPERTI TOWS MATRIX

Internal Factors / External Factors	Strengths (S) • (S1) The founders have expertise in property and IT sectors • (S2) Member of Property Developer and Fintech Association	Weaknesses (W) • (W1) Required adequate resources promoting to mass market to build trust • (W2) Need time to build trust • (W3) Need legal expert teams
Opportunities (O) • (O1) The market size and growth is great • (O2) Property crowdfunding is fresh idea in Indonesia • (O3) Property crowdfunding start-up is billion dollar business in USA, it can be the next big thing in SEA	S-O strategies • (S1, O2) Build a good product that offer high return and can be used easily by customers • (S2, O3) Partnership with developers within association to offer various interesting property investment	W-O strategies • (W1, O1) Using effective digital marketing to minimize cost • (W2, O2) Using community to spread information regarding InvesProperti platform • (W3, O3) Hiring dedicate people to cater the legal issues
Threats (T) • (T1) New competitors • (T2) The regulation for equity crowdfunding still not available in Indonesia *(on process)*	S-T strategies • (S1, T1) Build distinct service using good experiences and feedbacks by customers • (S2, T2) Using the network in association to get latest update on the regulation	W-T strategies • (W1, T1) Build product with distinct friendly user interface • (W2, T1) Build mobile app version to reach wider audience • (W2, T2) Join the events, exhibitions and some good competitions

Based on Table 3.1 above, the business strategies that InvesProperti can do are as follows:

1. InvesProperti should build good experience product and friendly user interface based on the customers' feedbacks. Mobile app version is one of option to reach wider audience.
2. To increase brand awareness, InvesProperti should attend several events such as exhibition, events and competitions so that many people will know InvesProperti brand exists.
3. Using effective and efficient digital marketing to minimize the cost structure. And also, using community to help spreading information regarding InvesProperti platform.
4. Keeping good partnership with developers within association to offer various interesting property investment to customers.
5. Optimizing the channels that InvesProperti has through social media and e-mail marketing to engage the customers about the product.

B. Macro Environment Analysis

Now that we have understand the root causes of the problems, we can start looking for the solution. First, we need to analyze the environment where the business is running and internal – external factors that can help InvesProperti solve the problem we have analyzed earlier in Fig. 2.6.

InvesProperti is working in the Fintech industry, or specifically crowdfunding equity based. Indonesia Fintech industry has been growing rapidly in the recent years. Based on data from Fintechnews Singapore, the projected transaction value in 2018 is reaching magnificent USD 22,338 million, while the transaction value is expected to growth 16.3% annually. Besides Fintech industry, InvesProperti business is also related to the residential property sector, which is also full of potential. The large population of Indonesia, urbanization, and government support are only three of many sectors that boosts In vdonesia's residential property sector in the upcoming years.

As Jakarta has shown signs of saturation, recently, more property developments are undertaken in cities around Jakarta, such as Tangerang, Bekasi, Bogor, Depok, and bigger cities in other part of Indonesia, such as Bandung, Malang, Surabaya, Balikpapan, Yogyakarta, and some others. These property development projects are mostly targeted at the middle or lower income segments; hence the price is more reachable by an uprising crowdfunding platform like InvesProperti.

C. GE Matrix Analysis

To help us determine the effective business strategy, we are going to implement the GE (General Electric) matrix. GE matrix is a 3x3 matrix in which the y-axis is the industry attractiveness of a business and the x-axis is the business unit strength of a business. Both axes are classified into high, medium, and low level. First, we have to determine the business attractiveness and business unit strength of InvesProperti using the following criteria, with each criteria rated 1-5.

Below is the GE Matrix table that describe the business attractiveness and business strength of InvesProperti.

TABLE 3.2
INVESPROPERTI GE MATRIX

Business Attractiveness	Weight	Rate	Score	Business Strength	Weight	Rate	Score
Market size	0.25	3	0.75	Value proposition	0.25	5	1.25
Market growth	0.25	3	0.75	Product uniqueness	0.20	4	0.80
Entry-exit barrier	0.10	2	0.20	Marketing concept	0.20	3	0.60
Profit margin	0.20	3	0.60	Business model	0.25	4	1.00
Competition	0.20	2	0.40	Market validation	0.10	5	0.20
Total	1		2.70	Total	1		3.85

According to the business attractiveness and business unit strength score, we can determine InvesProperti's position on the GE matrix as explained in the table below.

TABLE 3.3
INVESPROPERTI'S POSITION ON THE GE MATRIX

Long-term Attractiveness		Business Strength		
		Strong	Average	Weak
	High			
	Medium	InvesProperti		
	Low			
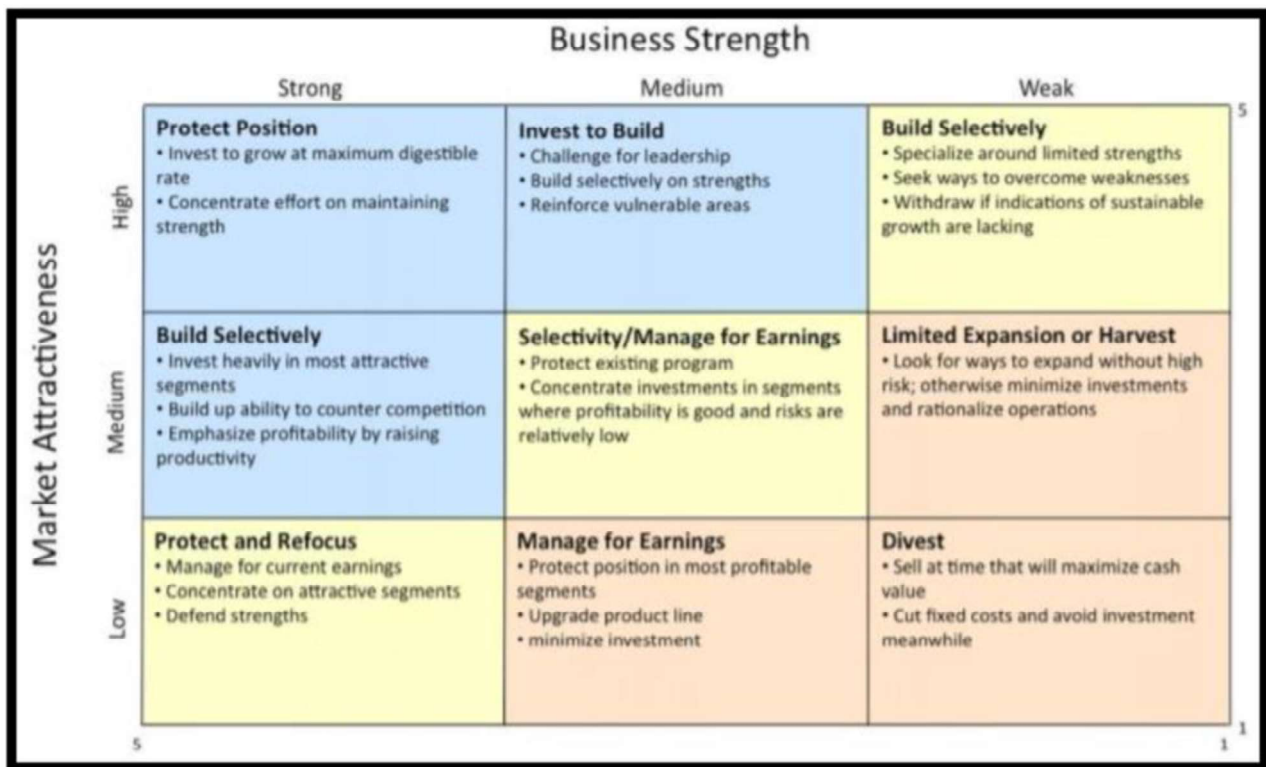
Fig. 3.1 Strategy suggestion based on GE matrix position

Now, based on InvesProperti's position on the GE matrix, we can look for strategy on Fig. 3.1.

According to Fig. 3.1, InvesProperti should build selectively by doing the 3 suggestions listed in the matrix. However, the 3rd point isn't very suitable to the type of business InvesProperti is doing, hence we are going to put more highlight to the first 2 points. InvesProperti has identified that the most attractive segments are millennials, hence in accordance with Fig. 3.1, InvesProperti has to figure out ways to attract millennials and invest heavily in it.

Besides that, InvesProperti needs to be wary of possible competition in the future, build a strong brand and emphasize it, because dazzling interface or superb features only keeping users for 3 months, that's why the market gets competitive, company with the strong brand will thrive above the rest. Moreover, a research by mindsea.com showed that 45% millennials use an application because of their friends, hence putting emphasis to a brand that can attract millennials would widen the scope of InvesProperti exponentially due to mouth-to-mouth promotion between users.

Based on the SWOT, TOWS matrix analysis and GE matrix position of InvesProperti, there are some key points that need to be noted to form an effective business strategy:

1. InvesProperti should invest heavily in millennials market as the main target
2. Millennials buy products that are aligned to their personal values, to dominate a millennials market, we have to identify the value that millennials seek from a product/service, and try to adjust from them, for example by:
a. Showing legal structure on website and recruit more team members
b. Allowing users to register property through InvesProperti's website
c. Providing additional features, such as buy to rent or buy to live in
3. Build a strong brand that can catch millennials' attention
4. Partnership with property agency groups or micro-influencers can increase market engagement
5. Reconsider value proposition for property developers

D. Impact Feasibility Matrix of Plausible Actions

After thoroughly analyzing InvesProperti in various aspects, now we can list the plausible actions in the Impact-Feasibility matrix to determine which actions InvesProperti should do to solve its problems as clearly mentioned in the Figure below.
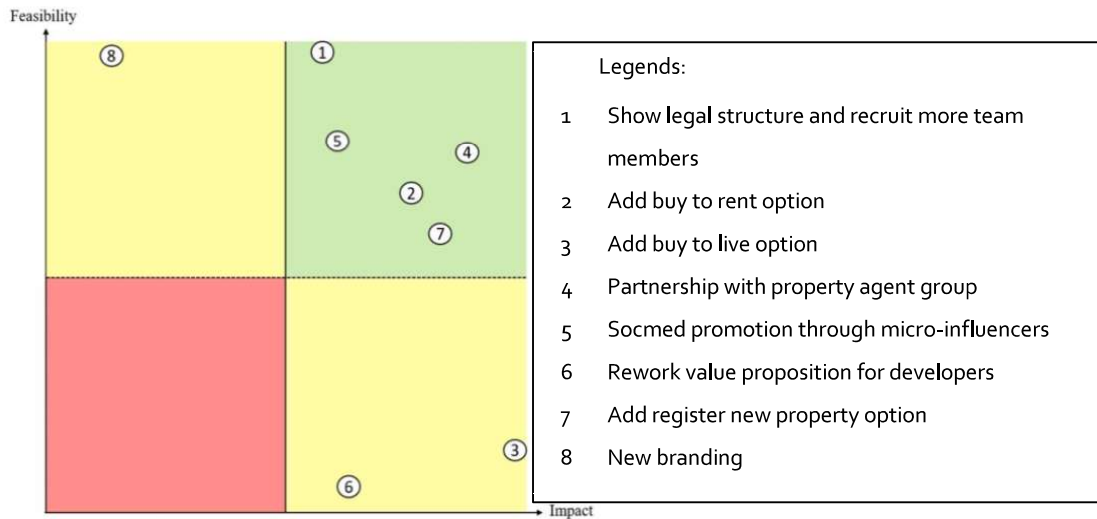
Fig. 3.2 Impact Feasibility Matrix of Plausible Actions for InvesProperti

In Fig. 3.2, the impact is measured by the urgency of the problem it solves, whereas the feasibility of each action is measured by several factors; capital requirement, time requirement, external parties' involvement, and complexity of the action.

Showing legal structure on the website improves InvesProperti's trustworthiness in the eye of users, which is one of the deciding factors whether a millennial is using a product or not. It doesn't require any money, neither does it require a thorough brainstorming process, so it deserves to be regarded as very feasible and give medium-high impact.

Adding option for rent might give bigger impact than showing legal structure, however adding option for rent obviously can reduce the revenue that InvesProperti gets. Another option we can provide to the users is to register their new property to be listed on our website, which might attract a lot of new users, however we have to first secure a partnership with housing authorities before making such move, hence it is less feasible than the earlier option. A hardcore version of the previous option is adding option to live in, which would make everyone wants to buy a house through InvesProperti, however we need to first build a system and consider many factors before implementing this system, hence not feasible in the near future.

Moving onto the next option, partnership with property agency group is simply easy and impactful, it won't be hard to negotiate with them because we are essentially making their job easier without reducing their income. Serving rather similar impact, working with micro-influencers are less effective than property agents at increasing market engagement.

Reworking value proposition for developers means that we are starting all over again, this would possibly disrupt many essential parts of the business that are already running, hence very not feasible. Even if we do it, we don't want know about the result either, so we can't risk everything that we have now for such uncertainty.

A new branding seems to be needed to attract millennials, but the current brand that InvesProperti has, easy and safe, is already suitable for millennials. What could be done instead is putting more emphasize on the brand by creating tagline such as "3 easy ways to profit" or "cari investasi gampang dan aman? InvesProperti aja!" that can be implemented by the partner micro-influencers or emphasize the tagline by showing it more across the website, so users subconsciously remember it even when they are not reading it on purpose.

Lastly, InvesProperti can apply an integrated marketing communication to make millennials more aware about the product. #PastiBisa strategy is one of the option, a campaign aimed to encourage millennials to invest, especially in property crowdfunding. The grand-theme of this campaign is all about promoting the benefits in property investment and introducing InvesProperti as a trustworthy crowdfunding platform focusing in property investment. This campaign consists of three milestones which are pre-event, main event, and post-event. Along with these main milestones, another initiative from this campaign called Young Investor Ambassador will be also executed parallel.

IV. CONCLUSIONS

Based on the analysis of this research, this research will try to solve the current problems. Here are listed the conclusion from the research question which is discussed in the first chapter.

1. How are the current business situations and internal condition of InvesProperti?

To find out information about InvesProperti's internal business, researchers use two tools such as STP (Segmenting, Targeting, Positioning) and BMC (Business Model Canvas) analysis. The results of the research are to determine the strategies that would be proposed by InvesProperti. For external analysis, the researcher used Porter Five Forces and Competitor Analysis. Other tools such as SWOT and Root Cause Problems Analysis are also used to identify and prepare InvesProperti's strengths, overcome the weaknesses, find the opportunities, strategies to cope with multiple threats and to answer why the millennials are not investing their money through InvesProperti.

The analysis was conducted to find out what should be done by InvesProperti to develop the business and meet the market fit.

2. How to promote and introduce a crowdfunding platform of InvesProperti in Indonesia especially to the millennials as main target?

We will educate the millennials through the community that we build and create #PastiBisa campaign to encourage millennials to invest in the property industry using crowdfunding mechanism. Make a clear explanation how does it works? What are the benefits for them if invest through InvesProperti. And we should attend several events such as exhibition, events and competitions so that many people will know InvesProperti brand exists.

3. What business strategy can be implemented by InvesProperti in order to overcome the business issue?

InvesProperti is a very promising start-up, it is shown by the business solution formulation that has been generated in previous chapter. From the TOWS, Macro Environment and GE Matrix Position Analysis, we found out that the reasons why InvesProperti can't attract millennials are the limited product option, lack of partnership or property projects that listed on the platform, lack of brand emphasis, and questionable value propositions for developers. Some strategies that InvesProperti can do as follows:

- Educating the millennials about the importance of investment as early as possible especially in property sector using crowdfunding mechanism that are easy, low capitals, high returns, transparent and safe.
- Attending several events such as exhibition, events and competitions. It aims to help InvesProperti improve consumer brand awareness manually.
- Developing good experience product and friendly user interface based on the customers' feedbacks. Mobile app version is one of option to reach wider audience.
- Using effective and efficient digital marketing to minimize the cost structure. And also, using community to help spreading information regarding InvesProperti platform. Penetrate to the big investor (B2B) is one of the option that InvesProperti can do to leverage the product to mass market.
- Keeping good partnership with developers within association to offer various interesting property investment to customers. And offering the opportunity to collaborate with property agent to increase market engagement.
- Maintaining and optimizing the channels that InvesProperti has through social media and e-mail marketing to engage the customers about the product. And if possible use micro-influencers to reach wider markets.
- Keep being up-to-date to the Financial Services Authority (OJK) regulation that still under the planned about crowdfunding equity regulation to get public trust.

4. How can InvesProperti implement the proposed strategy and increase the revenues and awareness?

Based on the exploration of business issue and possible business strategies to be undertaken by InvesProperti, several things that can be implemented are as follows:

- Build the InvesProperti's own channel using group or community base through Telegram, Whatsapp or e-mail to educate millennials about the financial management, investment, tips and tricks, and related topic before inviting them to invest in InvesProperti.
- Mark calendar and set the schedule: InvesProperti should look for the information about the events (such as startup, investment, property, business and related events) that InvesProperti can be joined or attended.
- Do some research about the user's behavior that use the existing website, try digging deeper feedbacks from them. And recruiting additional team, such as UI/UX designer, programmer and product development to control and optimizing the InvesProperti's product to be more applicable and interactive to the millennials.
- Try advertising through Facebook, Instagram and Google Ads to target the millennials using the attractive designs and good content of copywriter. Recruiting the team to be in charge in the digital marketing, community and partnership division to observe and see the possibilities to spread InvesProperti product to big companies and their employees at the same time. Exhibiting in their office location to give the information about the property investment in InvesProperti is one of good example to be applied.
- Stay in touch with the developers, survey to the project location, collect the progress report and ask their testimonials about their project that collaborate with InvesProperti. And try to approach the property agents as InvesProperti's affiliation to reach the hidden market.
- Endorse micro-influencers or the related community to use and spread the good information about InvesProperti to their fans or community.
- Trust is really matter in InvesProperti's situation. Doing consultation and visit to OJK to be more up-to-date to the current regulation and register to their Sandbox Regulatory before the crowdfunding equity's regulation published.
- Last but not least, InvesProperti must build a strong and solid team that should divide the appropriate job description for each division with the clear plan and goal to achieve the KPI (Key Performance Indicator) of the company.

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Financial Performance-Market Value Analysis by Using Promethee Method: BIST 100 Application

Nalan Ece

Abstract—Profit maximization is the basis of the company management's decisions. Identifying the capabilities and performance that exist within the company is important to achieve this. When the performance analysis is performed well, the market value of the company is also expected to increase. It is aimed to determine the business strategies and to apply them in a rational and economical way by performance analysis. Decision-makers in companies use the analyzes made with different Multi-Objective Decision-Making Methods in order to determine their corporate strategies and make the most accurate decision. Analysis methods that provide maximum benefit by using financial data are preferred. The aim of this study is to determine the relationship between the market value and financial performance of BIST 100 companies (Istanbul Stock Exchange 100 Index) operating in Turkey by PROMETHEE method. For this purpose, financial performance and market value analysis of the 100 companies traded in Istanbul Stock Exchange in line with the balance sheet and income statement data of 2017 were carried out. According to the results of the analysis, it was found that among all companies traded in BIST 100, the banking sector proved to be at the top level of market value with financial performance in 2017.

Keywords—Financial performance, financial ratio, Promethee method

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The Moderating Effect of the Strength of Leader Emotional Expressivity on the Direct Effect of Authentic Leadership on Follower Job Performance

Nevra Baker

Abstract—This research attempts to explain the moderating effect of the strength of leader emotional expressivity on the direct effect of authentic leadership on follower job performance. Accordingly, quantitative data were collected through surveys from employees of service-rendering companies in Istanbul. The findings of this research have shown that the strength of leader emotional expressivity weakened the favorable effects of authentic leadership on follower job performance for highly authentic leaders. In contrast, higher leader emotional expressivity compensates for low levels of leader authenticity and increases follower job performance.

Keywords—Authentic leadership, emotions, follower job performance, leadership, leader emotional expressivity.

I. INTRODUCTION

AUTHENTIC leadership is one of the most widely researched theories in leadership. The creators of this construct assert that the decline in ethical leadership (e.g., WorldCom, Enron, Martha Stewart) together with a rise in societal troubles (e.g., September 11 terrorism, fluctuating stock values, a downturn in the economy) entails the need for authentic leadership more than in earlier times [7]. They also discuss that present frameworks are not adequate for training leaders of the future [1]. Antecedents and outcomes of authentic leadership have been explored by several researchers (e.g., [10], [18], [24], [23]). According to [4] and [8], self-knowledge is a prerequisite for authentic leadership. Reference [23] cites that leaders who have a high level of self-knowledge are clear about their values and convictions. Another antecedent for authentic leadership is self-consistency [20]. Reference [26] argues that it is of utmost importance for leaders to show consistency between their values, beliefs, and actions in order to be perceived as authentic.

Emotions are omnipresent in leader-follower interactions, originating from and affecting them [22], [25]. Because leaders have a deep influence on the activity of organizations and their insiders [30], leader emotional expositions have solid capacity to affect how their subordinates feel, think, and act [11]. In this study, the contribution of authentic leadership to follower job performance, as well as the moderating effect of the strength of leader emotional expressivity on the effect of the former on the latter was analyzed.

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II. LITERATURE REVIEW

A. Authentic Leadership and Follower Job Performance

Job performance is defined as the actions and behaviors of individuals that add to organizational goals [21]. Authentic leaders act in pursuance of their values and struggle to reach openness and honesty in their relationships with followers [10], [16]. Authentic leaders can set an example and exhibit transparent decision making [1]. Setting an example manifests a leader's engagement to his or her work and supplies followers with guidance about how to stay emotionally and physically bonded and mentally awake in the course of job performance. Reference [27] debated that moral behaviors of authentic leaders eventually lead the way for their followers due to their appeal and trustworthiness as role models, which results in augmented personal identification of followers with their leaders.

Followers of authentic leaders are inclined to ascribe extraordinarily strong positive characteristics to the leaders, adopt their values and credence, and act coherently with them. For instance, [2] suggests that the actions of authentic leaders are considered by followers as being conducted by superior ethical norms and described by justice, truthfulness, and integrity when interacting with followers. Consequently, such leaders are capable of arousing values collectively held by their followers through transparency, constructiveness, and superior moral norms. Herewith, in line with the Social Exchange Theory [5], followers' willingness to manifest positive behaviors and their feeling of self-esteem and liability to give back are raised (e.g., [14], [29]). Empirical support also affirms the theoretical comprehension of why authentic leaders affect their followers' performance favorably. For instance, [27], [28] and [13] have discovered that authentic leadership behavior has a positive relation to supervisor-rated job performance. Again, [12] found that authentic leaders motivate followers through the agency of modeling and conveying a profound feeling of accountability to transfer favorable outcomes over a long-time span. Thus, we suggest the following hypothesis:

H1. Authentic leadership will have a positive contribution to follower job performance.

B. The Moderating Effect of Leader Emotional Expressivity on the Direct Effect of Authentic Leadership on Follower Job Performance

Job performance is defined as the actions and behaviors of individuals that add to organizational goals [21]. According to

our assumptions, leaders who express their true emotions will be regarded by their followers as more approachable. Based on the concept of personal identification [15]; we assume that leaders who express their emotions will be easier for followers to take as an example and to identify with, compared with leaders who keep their true feelings to themselves. Leaders who can act as a role model will also be able to show their followers which actions to take in order to contribute to the objectives of the organization, and as a result of the personal and social identification of followers with their leaders, they will try to mimic their leader's successful actions which will boost their job performance. Therefore, we suggest that in case of leaders who are lower in authenticity, a stronger leader emotional expressivity will compensate for the lack of authenticity and increase perception of followers that their leader is approachable and can be identified with, which will positively contribute to their job performance as a result of the personal and social identification with their leader. In contrast, for leaders who are already highly authentic, a strong leader emotional expressivity will be perceived by followers as the leader is expressing an overly-possessive leadership and as the leader is crossing a boundary when interacting with followers. Thus, the author proposes the hypothesis below:

H2. The direct effect of authentic leadership on follower job performance will be moderated by the strength LEE, in such a way that the relationship between authentic leadership and follower job performance is more positive for those employees whose leaders are lower on LEE as compared to those whose leaders are higher on LEE.

III. METHODOLOGY

A. Research Design

The aim of this study is to test the contribution of authentic leadership to follower job performance and moderating effect of the strength of LEE on the effect of authentic leadership on follower job performance.

The model depicting the hypothetical relationships is presented in Fig. 1.
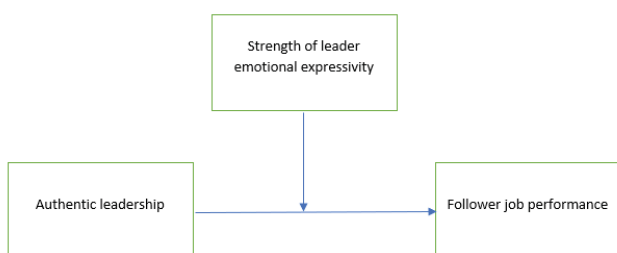
Fig. 1 Conceptual model of the study

Two surveys were undertaken in order to test both the contribution of authentic leadership to follower job performance and finding out the moderating effect of the strength of LEE on the relationship between authentic

leadership and follower job performance. In the employee survey, the participants were asked to rate their perception of the authenticity and emotional expressivity of their actual leaders. After the participants completed the employee survey, in the supervisor survey, the actual leaders of the participants were asked to rate the job performance of each participant. Authentic Leadership Inventory-ALI by [19] and Emotional Expressivity Scale by [17] were utilized for the participants to rate their actual leader. In addition, for the ratings of follower job performance, the in-role performance scale developed by [28] was used. The questions were read to the participants and their answers were recorded on a tablet PC.

B. Sample

A total of 258 employees working in the services departments from 32 firms and their immediate supervisors were contacted, accounting for a total of 516 responses. The average age of the employees is 28.64, ranging from 18 to 62, whereas the average age of their immediate supervisors is 34.83, ranging from 24 to 51. 94 (36.4%) of the contacted employees and 53 (20.5%) of their immediate supervisors are female. 42 (16.3%) of the contacted employees attended only elementary school, 160 (62%) are high school graduates, 54 (20.9%) attended university, and 2 (0.8%) completed higher education. In contrast, 19 (7.4%) of their immediate supervisors finished elementary school, 107 (41.5%) graduated from high school, and 132 (51.2%) are university graduates. For employees, the average working years add up to 8.20, ranging from 1 to 40. Their managers, who were their immediate supervisors, on the other hand, have averagely worked for 15.16 years, ranging from 4 to 30 years. The average tenure of employees is 3.69 years, ranging from a minimum of 1 to a maximum of 20 years. The average tenure of their team leaders is 8.19 years, ranging from 2 to 18 years. 180 (34.9%) of the total of 516 respondents are from the retail industry, 98 (19%) work in the food industry, 96 (18.6%) come from the textile industry, 34 (6.6%) work in the IT sector, 24 (4.7%) are from the electronics industry, 20 (3.9%) work in the financial industry, 16 (3.1%) come from the construction industry, another 16 (3.1%) work in the paper industry, and again another 16 (3.1%) are hired in the agricultural industry, 12 (2.3%) deal with trade, and lastly 4 (0.8%) are employed in customer services.

C. Hypothesis Testing

Regression analysis has been undertaken in order to test the contribution of authentic leadership to follower job performance. For the regression analysis, two models have been created. The first model tests the effect of control variables on the dependent variable, and the second model tests the effect of the independent variables on the dependent variable, in addition to the effect of the control variables on the dependent variable.

For the measurement of the direct effect of authentic leadership on follower job performance, the multiple regression models are expressed as follows:

Model 1: Follower job performance $= \beta_0 + \beta_1*(Age) +$

$\beta_2*(Gender) + \beta_3*(Tenure) + \varepsilon$

Model 2: Follower job performance $= \beta_0 + \beta_1*(Age) + \beta_2*(Gender) + \beta_3*(Tenure) + \beta_4*(Authentic\ leadership) + \varepsilon$

In these models; age, gender, and tenure are control variables.

Tables 1 and 2 below demonstrate the multiple regression analysis results for the second dependent variable, follower job performance:

TABLE I
MODEL SUMMARY OF THE MULTIPLE REGRESSION ANALYSIS FOR THE CONTRIBUTION OF AUTHENTIC LEADERSHIP TO FOLLOWER JOB PERFORMANCE

					Model Summary					
Mo del	R	R^2	Adj. R^2	Std. Error of the Estimate	ΔR^2	ΔF	df1	df2	Sig. ΔF	Durbin-Watson
1	.17	.03	.02	.90	.03	2.63	3	254	.05	
2	.81	.66	.65	.53	.63	468.23	1	253	.00	1.73

TABLE II
REGRESSION COEFFICIENTS FOR THE CONTRIBUTION OF AUTHENTIC LEADERSHIP TO FOLLOWER JOB PERFORMANCE

Model	Ind. Variables	Unstd. Coefficients		Std. Coeff.	t	Sig.
		β	Std. Error	β		
1	(Constant)	4.65	.31		14.78	.00
	Age	-.02	.01	-.12	-1.39	.17
	Gender	-.18	.12	-.10	-1.57	.12
	Tenure	-.01	.02	-.02	-.28	.78
2	(Constant)	1.04	.25		4.15	.00
	Age	-.01	.01	-.07	-1.37	.17
	Gender	-.13	.07	-.07	-1.83	.07
	Tenure	.01	.01	.05	.98	.33
	Authentic leadership	.84	.04	.80	21.64	.00

As observed from the above tables, authentic leadership ($\beta = 0.80$, t = 21.64, p < .05) significantly predicts follower job performance. This model explains 65% of the variance (p < .05). Therefore, H1 (Authentic leadership will have a positive contribution to follower job performance) is supported.

For the moderation analysis, two models have been created. Along with the control variables, the independent variables of the regression are independent variable, moderator, and the interaction between independent variable and moderator. The first model tests the effect of the control variables on the dependent variable, and the second model tests the effect of the independent variable, the moderator, and the interaction between independent variable and moderator on the dependent variable, in addition to the effect of the control variables on the dependent variable.

The multiple regression models for the moderating effect of LEE on the relationship between authentic leadership and follower job performance are demonstrated as follows:

Model 1: Follower job performance $= \beta_0 + \beta_1*(Age) +$

$\beta_2*(Gender) + \beta_3*(Tenure) + \varepsilon$

Model 2: Follower job performance $= \beta_0 + \beta_1*(Age) + \beta_2*(Gender) + \beta_3*(Tenure) + \beta_4*(ZAuthentic\ leadership) + \beta_5*(ZLEE) + \varepsilon$

Model 3: Follower job performance $= \beta_0 + \beta_1*(Age) + \beta_2*(Gender) + \beta_3*(Tenure) + \beta_4*(ZAuthentic\ leadership) + \beta_5*(ZLEE) + \beta_6*(ZAuthentic\ leadership * ZLEE) + \varepsilon$

In these models; age, gender, and tenure are control variables.

Table 3 and 4 below show the moderating effect of LEE on the relationship between authentic leadership and follower job performance.

TABLE III
MODEL SUMMARY OF THE MULTIPLE REGRESSION ANALYSIS FOR THE MODERATION OF LEE ON THE RELATIONSHIP BETWEEN AUTHENTIC LEADERSHIP AND FOLLOWER JOB PERFORMANCE

					Model Summary					
Mo del	R	R^2	Adj. R^2	Std. Error of the Estimate	ΔR^2	ΔF	df1	df2	Sig. ΔF	Durbin-Watson
1	.17	.03	.02	.90	.03	2.63	3	254	.05	
2	.83	.69	.68	.51	.66	247.15	2	252	.00	1.72
3	.83	.69	.68	.51	.02	14.67	1	251	.00	

TABLE IV
REGRESSION COEFFICIENTS FOR THE MODERATION OF LEE ON THE RELATIONSHIP BETWEEN AUTHENTIC LEADERSHIP AND FOLLOWER JOB PERFORMANCE

Model	Ind. Variables	Unstd. Coefficients		Std. Coeff.	t	Sig.
		β	Std. Error	β		
1	(Constant)	4.65	.31		14.78	.00
	Age	-.02	.01	-.12	-1.39	.17
	Gender	-.18	.12	-.10	-1.57	.12
	Tenure	-.01	.02	-.02	-.28	.78

2	(Constant)	1.58	.29		5.51	.00
	Age	-.01	.01	-.06	-1.20	.23
	Gender	-.10	.07	-.05	-1.48	.14
	Tenure	.01	.01	.04	.91	.36
	ZAuthentic leadership	.52	.07	.50	7.15	.00
	ZLEE	.21	.05	.24	4.35	.00
3	(Constant)	4.35	.18		24.05	.00
	Age	-.01	.01	-.06	-1.20	.23
	Gender	-.10	.07	-.05	-1.48	.14
	Tenure	.01	.01	.04	.91	.36
	ZAuthentic leadership	.46	.06	.50	7.15	.00
	ZLEE	.22	.05	.24	4.35	.00
	ZAuthentic leadership* ZLEE	-.17	.04	-.20	-3.83	.00

As seen in the tables above, LEE (β = -0.20, t = -3.83, p < .05) moderates the relationship between authentic leadership and follower job performance. While LEE has a positive contribution (β = .24, t = 4.35, p < .05) to the dependent variable of job performance, the interaction of LEE with authentic leadership is negative. The model explains 69% of the variance (p < .05) in the dependent variable. Therefore, H2 (The direct effect of authentic leadership on follower job performance will be moderated by the strength of LEE, in such a way that the relationship between authentic leadership and follower job performance is more positive for those employees whose leaders are lower on LEE as compared to those whose leaders are higher on LEE) is supported.

IV. DISCUSSION AND CONCLUSION

As hypothesized and found in H1, followers of authentic leaders benefit from greater job performance. Reference [3] suggests that authentic leadership may be thought of as a metaphor for professionally effective, ethically sound, and consciously reflective practices in educational administration. Naturally, these characteristics of authentic leaders will have a positive contribution to their followers' job performance.

As hypothesized and found in H2, LEE moderates the direct effect of authentic leadership on follower job performance. Although LEE has a significant positive contribution to follower job performance; parallel to our expectations, higher LEE weakens the positive contributions of authentic leadership to follower job performance for leaders who are strongly authentic. We assumed that leaders who express their true emotions would be regarded by their followers as more approachable and easier for followers to take as an example and to identify with. Therefore, they could act as role models for their followers and show them which actions to take in order to contribute to the objectives of the organization. The findings indicate that LEE has a positive contribution to follower job performance. Also, in parallel to our propositions, the strength of LEE weakened the contributions of authentic leadership to follower job performance for leaders who are highly authentic. Namely, if leaders are highly emotionally expressive and if they are at the same time strongly authentic, then the interaction of these two strong qualities results in

weaker positive contributions of authentic leadership to follower job performance. On the other hand, higher LEE compensates for the low levels of authenticity in terms of increasing follower job performance.

The combination of very strong authenticity by the leader and being highly emotionally expressive may result in an overly-possessive kind of leader-follower relationship in the eyes of the followers, such as in case of an overly possessive relationship between adults and children, where adults have a wish to be fully in control of the situation and attempt to make sure that they will get their fair share of benefits from the relationship [9]. Such a view of the leader by the followers may contribute to the decrease in follower job performance. Namely, followers may think that their leader is crossing a boundary with them by being highly emotionally expressive in addition to being strongly authentic.

The results of this study also highlight the fact that there can be a LEE premium, in such a way that leaders who are not strongly authentic, however, if they are highly emotionally expressive, this high level of emotional expressivity can compensate for their lack of authenticity. Therefore, followers may commit to a highly emotionally expressive leader even if this leader lacks authenticity. The existence of a high level of LEE can thus alter the charisma of the leader in parallel with the findings by [6], where mood contagion, through the expression of positive emotions, was one of the psychological mechanisms by which charismatic leaders influence followers.

V. DIRECTIONS FOR FUTURE RESEARCH

This study does not explain the reason why the strength of LEE weakened the contributions of authentic leadership to follower job performance for leaders who are highly authentic. Therefore, we suggest that follower characteristics such as individualism or egalitarianism values can be studied in future research in order to be able to interpret the moderation of LEE better. We think that follower characteristics, which were beyond the scope of this research, can play a role in the negative moderating effect of LEE on the relationship between authentic leadership and follower job performance. For example, followers, if they share an egalitarian point of view, might more strongly regard the highly emotionally expressive leader as crossing a boundary and become intimidated by that leader.

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The Moderating Effect of Leader Emotional Expressivity on the Relationship between Leader-Member Exchange and Follower Job Satisfaction

Nevra Baker

Abstract—This research attempts to explain the moderating effect of the strength of leader emotional expressivity on the direct effect of leader-member exchange (LMX) on follower job satisfaction. Accordingly, quantitative data were collected through surveys from employees of service-rendering companies in Istanbul. The findings of this research have shown that the strength of leader emotional expressivity weakened the favorable effects of LMX on follower job satisfaction for high LMX leaders. In contrast, higher leader emotional expressivity compensates for low levels of LMX and increases follower job satisfaction.

Keywords—Emotions, follower job satisfaction, leadership, leader emotional expressivity, leader-member exchange.

I. INTRODUCTION

LMX describes the quality of the reciprocal relationship that is formed between employees and supervisors [17]. LMX theory asserts that limitations of the supervisor's time and resources restrict the number of high-quality exchange co-operations the supervisor can establish with subordinates. Therefore, the supervisor determines a narrow group of subordinates with whom he or she shares socio-emotional resources that will result in augmented reciprocal trust, liking, and esteem. This social exchange relationship ensures that selected subordinates obtain more abundant resources from the supervisor and the supervisor acquires enhanced performance and devotion of competent employees. In contrast, low-quality relationships are restricted to the exchange of determinate contractual resources [7], [16].

Emotions are omnipresent in leader-follower interactions, originating from and also affecting them [20], [25]. Because leaders have a deep influence on the activity of organizations and their insiders [6], leader emotional expositions have solid capacity to affect how their subordinates feel, think, and act [8].

In this study, the contribution of LMX to the follower job satisfaction, as well as the moderating effect of the strength of leader emotional expressivity were analyzed.

II. LITERATURE REVIEW

A. LMX and Follower Job Satisfaction

Job satisfaction has been portrayed as a "pleasurable or positive emotional state resulting from the appraisal of one's

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job or job experiences" [18]. With respect to [6], when higher quality LMX relationships are present, job satisfaction should increase because followers make use of the physical and relational advantages of that quality relationship.

LMX researchers defend that leaders manifest diverse leadership behaviors when coping with separate subordinates (e.g. [10]). High-quality LMX employees add more to work accomplishments. Consequently, they obtain higher supervisor consideration and greater encouragement. Low-quality LMX employees, however, do not have the benefit of such advantageous behaviors and experience a more legit relationship with the supervisor (e.g. [10]).

Social Exchange Theory [2] asserts that two or more sides engage in interactive exchanges with one another, for instance in terms of esteem, dignity, companionship and consideration, expecting that the other side will collaborate correspondingly [26]. High-quality LMX employees tend to obtain greater care and help from their supervisors as reciprocity for their diligence. This sort of social exchange will eventually generate higher job satisfaction [19]. Empirical research has also validated that LMX is positively related to employee job satisfaction (e.g. [11], [12], [21], [24], [9].

Numerous studies carried out in the Turkish health, private, educational, and services sectors pointed out a positive relationship between LMX and follower job satisfaction [5], [14], [4], [27], [1], [23].

The above discussion leads to the following hypothesis:

Hypothesis 1: LMX will have a positive contribution to follower job satisfaction.

B. The Moderating Effect of the Strength of Leader Emotional Expressivity on the Direct Effect of LMX on Follower Job Satisfaction

Reference [18] defined job satisfaction as a "pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences". According to us, emotions are a great way to show how one appraises another's deeds. For example, if a leader shows contentedness towards a follower right after his or her action, the follower will think that this action made the leader happy. Or, vice versa, if an expression of anger by the leader follows a follower's action, the follower will think that something is wrong with what he or she has just done. On the other hand, followers of leaders who generally act neutral will not know what their leader feels about how they are doing, and therefore will not be able to get the necessary appraisal from their leaders, which is a prerequisite for job

satisfaction, according to [18]'s definition. Thus, we come up with the suggestion that in case of leaders who engage in a lower level of LMX, a stronger leader emotional expressivity will compensate for the lack of the LMX relationship and increase the perceptions of the followers as being appraised by their leaders, which will contribute positively to their job satisfaction. In contrast, for leaders who engage in a high level of LMX, a strong leader emotional expressivity will be perceived by followers as the leader is expressing an overly-possessive leadership and the leader is crossing a boundary when interacting with followers.

In sum, we expect that leader emotional expressivity (LEE) will compensate for the negative implications of a low level of LMX by encouraging follower job satisfaction. If a leader engages in a low level of LMX relationship, and if this leader demonstrates a high level of LEE, then this high level of LEE will compensate for the lack of LMX by increasing follower job satisfaction. On the other hand, if a leader already demonstrates a high level of LMX, in this case, a high level of emotional expressivity by the same leader will be perceived by the followers of this leader as intimidating and they will feel that their leader is crossing a boundary when interacting with them. Therefore, followers' job satisfaction will again increase, however less strongly as compared to strong-LMX leaders who demonstrate a lower level of emotional expressivity. Namely, if leaders engaging in a high level of LMX relationship with their followers demonstrate a lower level of emotional expressivity, then there will be a more positive relationship between LMX and follower job satisfaction, in comparison to leaders who demonstrate a higher level of emotional expressivity. In other words, if a high-LMX leader does not express a very high level of emotional expressivity, then follower job satisfaction will increase more strongly with increasing LMX. Thus, we propose the following hypothesis:

Hypothesis 2: The direct effect of LMX on follower job satisfaction will be moderated by LEE, in such a way that the relationship between LMX and follower job satisfaction is more positive for those employees whose leaders are lower on LEE as compared to those whose leaders are higher on LEE.

III. METHODOLOGY

A. Research Design

The aim of this study is to test the contribution of LMX to follower job satisfaction. In addition, this study aims to test the moderating effect of the strength of LEE on the direct effect of LMX on follower job satisfaction.

The model depicting the hypothetical relationships is presented in Fig. 1.

Fig. 1 Conceptual model of the study

An employee survey was undertaken in order to test the contribution of LMX to follower job satisfaction and finding out the moderating effect of the strength of LEE on the relationship between LMX and follower job satisfaction. The participants were asked to rate their perception of the LMX and emotional expressivity of their actual leaders, and then they were asked to rate their own actual level of job satisfaction. LMX Scale by [22] and Emotional Expressivity Scale by [15] were utilized for the participants to rate their actual leaders. For the ratings of follower job satisfaction, the items of the job satisfaction scale by [3], shortened to a five-item scale by [13], was used. The questions were read to the participants and their answers were recorded on a tablet PC.

B. Sample

A total of 258 employees working in the services departments from 32 firms were contacted. The average age of the employees is 28.64, ranging from 18 to 62. 94 (36.4%) of the contacted employees are female. 42 (16.3%) of the contacted employees attended only elementary school, 160 (62%) are high school graduates, 54 (20.9%) attended university, and 2 (0.8%) completed higher education. The average working years add up to 8.20, ranging from 1 to 40. The average tenure is 3.69 years, ranging from a minimum of 1 to a maximum of 20 years. 90 (34.9%) of the total of 258 respondents are from the retail industry, 49 (19%) work in the food industry, 48 (18.6%) come from the textile industry, 17 (6.6%) work in the IT sector, 12 (4.7%) are from the electronics industry, 10 (3.9%) work in the financial industry, 8 (3.1%) come from the construction industry, another 8 (3.1%) work in the paper industry, and again another 8 (3.1%) are hired in the agricultural industry, 6 (2.3%) deal with trade, and lastly 2 (0.8%) are employed in customer services.

C. Hypothesis Testing

Regression analysis has been undertaken in order to test the contribution of LMX to follower job satisfaction. For each regression analysis, two models have been created. The first model tests the effect of control variables on the dependent variable, and the second model tests the effect of the independent variables on the dependent variable, in addition to the effect of the control variables on the dependent variable.

For the measurement of the contribution of LMX on follower job satisfaction, the multiple regression models are expressed as:

- Model 1: Follower job satisfaction = β_0 + β_1*(Age) +

β_2*(Gender) + β_3*(Tenure) + ε
- Model 2: Follower job satisfaction = β_0 + β1*(Age) + β_2*(Gender) + β_3*(Tenure) + β_4*(LMX) + ε

In these models; age, gender, and tenure are control variables.

Tables I and II show the results of the multiple regression analysis regarding follower job satisfaction.

TABLE I
MODEL SUMMARY OF THE MULTIPLE REGRESSION ANALYSIS FOR THE CONTRIBUTION OF LMX TO FOLLOWER JOB SATISFACTION

					Model Summary						
Model	R	R^2	Adj. R^2	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					ΔR^2	ΔF	df1	df2	Sig. ΔF	
1	.12	.01	.00	.98	.01	1.21	3	254	.31	
2	.82	.68	.67	.56	.66	520.76	1	253	.00	2.10

TABLE II
REGRESSION COEFFICIENTS FOR THE CONTRIBUTION OF LMX TO FOLLOWER JOB SATISFACTION

Model	Ind. Variables	Unstd. Coefficients		Std. Coeff.	t	Sig.
		β	Std. Error	β		
1	(Constant)	4.01	.34		11.73	.00
	Age	.00	.01	.00	-.00	1.00
	Gender	-.07	.13	-.03	-.51	.61
	Tenure	-.03	.03	-.11	-1.30	.19
2	(Constant)	.21	.26		.82	.42
	Age	.01	.01	.06	1.20	.23
	Gender	-.04	.07	-.02	-.50	.62
	Tenure	-.01	.01	-.02	-.50	.62
	LMX	.89	.04	.83	22.82	.00

According to the above tables, LMX (β = 0.83, t = 22.82, p < .05) significantly predicts job satisfaction. This model explains 67% of the variance (p < .05). Thus, the hypothesis H1 (LMX will have a positive contribution to follower job satisfaction) is supported.

For the moderation analysis, two models have been created. Along with the control variables, the independent variables of the regression are independent variable, moderator, and the interaction between independent variable and moderator. The first model tests the effect of the control variables on the dependent variable, and the second model tests the effect of the independent variable, the moderator, and the interaction between independent variable and moderator on the dependent variable, in addition to the effect of the control variables on the dependent variable.

The multiple regression models for the moderating effect of LEELEE on the relationship between LMX and follower job satisfaction are demonstrated as follows:

Model 1: Follower job satisfaction = β_0 + β_1*(Age) + β_2*(Gender) + β_3*(Tenure) + ε

Model 2: Follower job satisfaction = β_0 + β1*(Age) + β_2*(Gender) + β_3*(Tenure) + β_4*(ZLMX) + β_5*(ZLEE) + ε

Model 3: Follower job satisfaction = β_0 + β_1*(Age) + β_2*(Gender) + β_3*(Tenure) + β_4*(ZLMX) + β_5*(ZLEE) + β_6*(ZLMX * ZLEE) + ε

In these models; age, gender, and tenure are control variables.

Table 3 and 4 below demonstrate the moderating effect of LEE on the relationship between LMX and follower job satisfaction.

TABLE III
MODEL SUMMARY OF THE MULTIPLE REGRESSION ANALYSIS FOR THE MODERATION OF LEE ON THE RELATIONSHIP BETWEEN LMX AND FOLLOWER JOB SATISFACTION

					Model Summary					
Model	R	R^2	Adj. R^2	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					ΔR^2	ΔF	df1	df2	Sig. ΔF	
1	.12	.01	.00	.98	.01	.1.21	3	254	.31	
2	.83	.69	.68	.55	.67	267.74	3	251	.00	2.07
3	.83	.69	.68	.55	.00	3.19	1	251	.08	

TABLE IV
REGRESSION COEFFICIENTS FOR THE MODERATION OF LEE ON THE RELATIONSHIP BETWEEN LMX AND FOLLOWER JOB SATISFACTION

Model	Ind. Variables	Unstd. Coefficients		Std. Coeff.	t	Sig.
		β	Std. Error	β		
1	(Constant)	4.01	.34		11.73	.00
	Age	.00	.01	.00	-.00	1.00
	Gender	-.07	.13	-.03	-.51	.61
	Tenure	-.03	.03	-.11	-1.30	.19
2	(Constant)	.47	.32		1.46	.15
	Age	.01	.01	.06	1.26	.21
	Gender	-.01	.07	-.01	-.18	.86
	Tenure	-.01	.01	-.03	-.68	.50
	ZLMX	.70	.08	.65	8.91	.00
	ZLEE	.14	.05	.15	2.84	.00
3	(Constant)	3.67	.20		18.65	.00
	Age	.01	.01	.06	1.26	.21
	Gender	-.01	.07	-.01	-.18	.86
	Tenure	-.01	.01	-.03	-.68	.50
	ZLMX	.64	.07	.65	8.91	.00
	ZLEE	.14	.05	.15	2.84	.01
	ZLMX*ZLEE	-.09	.05	-.10	-1.79	.08

According to the above tables LEE (β = -0.10, t = -1.79, p > .05) does not moderate the relationship between LMX (LMX) and follower job satisfaction. While LEE has a positive contribution (β = .15, t = 2.84, p < .05) to the dependent variable of follower job satisfaction, the interaction of LEE with LMX is insignificant, meaning that there is no moderating effect of LEE on the relationship between LMX and follower job satisfaction. The model explains 69% of the variance (p < .05) in the dependent variable. Therefore, H2 (The direct effect of LMX on follower job satisfaction will be moderated by LEE, in such a way that the relationship between LMX and follower job satisfaction is more positive

for those employees whose leaders are lower on LEE as compared to those whose leaders are higher on LEE) is not supported.

IV. DISCUSSION AND CONCLUSION

As hypothesized and found in H1, followers of leaders with a high level of LMX relationships enjoy a higher level of job satisfaction. Job satisfaction is defined by [18] as a "pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences". The positive relationship between high LMX leaders and their followers should contribute to the followers' positive job experiences.

Contrary to expectations in H2, LEE does not moderate the direct effect of LMX on follower job satisfaction, although LEE has a significant positive contribution to follower job satisfaction. We assumed that the strength of the emotional expressivity of the leaders would contribute to their followers' sense of being appraised by their leader, which is the core of reference [18]'s definition of job satisfaction, which read that job satisfaction is a "pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences"; therefore, we expected that high emotional expressivity would compensate for low levels of LMX. From the findings of the hypothesis testing, we see that the strength of LEE does not have a significant effect on the relationship between LMX and follower job satisfaction, although higher LEE itself still increases the outcome variable.

V. DIRECTIONS FOR FUTURE RESEARCH

This study does not explain the reason why the strength of LEE weakened the contribution of LMX to follower job satisfaction for leaders who engage in a high level of LMX relationship with their followers.

Therefore, we suggest that follower characteristics such as individualism or egalitarianism values can be studied in future research in order to be able to interpret the moderation of LEE better. We think that follower characteristics, which were beyond the scope of this research, can play a role in the negative moderating effect of LEE on the relationship between LMX and follower job satisfaction. For example, followers, if they share an egalitarian point of view, might more strongly regard the highly emotionally expressive leader as crossing a boundary and become intimidated by that leader.

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Relationship between Information Center and Organizational Learning: A Conceptual Evaluation

M. Yilmaz, H. B. Cetintas

Abstract—The information center is the institution in which printed and electronic information sources are provided, organized in accordance with certain rules or standards and are offered to the users. Information sources are the most important learning tools. As the information center hosts these, it makes an important contribution to individual and organizational learning. In this context, it will enable organizations with organizational learning efforts to accommodate and provide contemporary resources on institutional activities to realize individual learning and to realize organizational learning through individual learning. In this study, the role of the information center in organizational learning and the relationship between knowledge center and organizational learning are discussed.

Keywords—Information center, information resources, learning, organizational learning.

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Corporate Sustainability Strategies in Turkish Companies

H. B. Cetintas, M. Yilmaz

Abstract—Corporate sustainability is one of the inevitable concepts for today's companies. Corporate sustainability has benefits like improving the brand value, providing reputation and developing new products and services as well as it focuses on winning the trust of stakeholders and making this trust permanent. The aim of the study is to explain conceptually corporate sustainability with economic, environmental and social dimensions and to expose the sustainability strategies that companies can use.

Keywords—Responsibility, strategy, sustainability, sustainability strategies.

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Why Try to Crash the Party

Ismail H. Genc, M. Sajed Khan, Prakash Chathoth

Abstract—Data on tourist arrivals show that traveling public do not prefer to visit tourist welcoming (measured by an index) countries. Instead, they go to rich (and potentially unwelcoming) countries. We explain this observation by referring to the expected utility of decision makers (tourists) under different scenarios including the associated cost of actions taken/goods purchased. When faced with two choices, attractive country vs unattractive country to visit, potential international tourist chooses the attractive one, which is likely the richer one. With the help of a simple game theoric model, we illustrate a case to rationalize the theoretical explanation. Potential tourists are not necessarily swayed away by the offer of easy access to a particular country, which is considered unattractive. We also empirically test our model by using international tourist arrivals aggregated over 1995 and 2016. Our explanatory variables are per capita real GDP, real effective exchange rate, an index representing how welcoming a country is, and an index representing how free a country is. We replicate our model by a direct measure of worthiness of a country in the international stage, which is the country brand value. Our findings are that potential tourists would prefer to go to countries that they consider worthy of visit even if it is more difficult to gain access to these countries due to visa and other types of restrictions.

Keywords—International tourism, game theoric modeling of tourism, country brand value, econometric analysis.

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The Great Remedy: Promoting Peace through a Feminized-Language of Resolution

Gökhan Ak

Abstract—Women are affected by armed conflict in a number of ways: they may be both victims of violence and themselves combatants or members – voluntary or otherwise – of the armed forces. They may also potentially be actively involved in all phases of conflicts, and especially in the peace building processes, as well as in reconstruction and development policies. We admit to explore as the main aim of this study that one of the most crucial remedies to promote more peace during pre-or post-crisis and conflict processes could be achieved through a feminized language in the relief and peaceful resolutions of various international contentions and discords. The main reason behind this claim is our view that women's participation helps ensure that peace is more sustainable. However far too often, women are still excluded, which poses a threat to peace and security and sustainable development in several parts of the world.

Keywords—Peace-building, Gender, Resolution, Women.

"There remains something that seems right in the claim that women have been operating at an unfair disadvantage in the political process, though it's tricky pinning down just what gives rise to that intuition." – John Hart Ely (1980) [1]

I. INTRODUCTION

IN the world history so far, there had been countless wars and battles due to disputes and conflicts stemming from internal or international issues by affecting closely societal aspects such as environment, gender, development [2]; and it is highly likely that they would appear anytime in the future or get worse by time. Nevertheless, the crucial part of this occurrence is that all those conflicts by being directly related with the future of humankind pose serious threats to the peace and thus well-being of all societies in the world.

However, the key point in this issue seems to be the varieties in people's perception. It is due to the wide consideration and acceptance that, *"whenever you hear the word "peace," do you immediately think of "war," and men? To many people, "peace" is often an antonym to "war." "Peace" events we see in the media often involve leaders of various nations shaking hands or signing peace treaties. Sometimes, United Nations envoys are shown diligently resolving conflicts among ethnic groups or nations. The envoys and leaders in those scenarios are usually men, as if they were the only ones, who make peace after wars are started - by men"* [3].

Thus, in line with that upper view, we could comment that it is seemingly a dilemma of perception for some people why they are so unaware of those critical global problems, and they have different views upon the relations between the terms "peace", "gender" [4], "woman" [5] and "societal problems". When a "woman" describes her interpretation of

the ideal of "peace" regarding an international problem or dispute from a "gender" perspective [6], or a woman strives to participate in peace-making processes [7] by efforts to eliminate further risks and threats to peace and security as well as sustainable environment and development, some get displeased showing dissatisfaction and arguing of (1) why women aspire to deal so vividly with those problems; (2) how the notion of struggling via feminized-efforts for the prevention of global environmental problems with the concept of "peace" is bound up with each other; and (3) what benefits the participation of women to conflict prevention and resolution processes will ensure in achieving peace-making and peace-keeping.

In the beginning, studies related with women were accused of being 'political'. However, feminist scholars answered, that traditional gender-blind research in itself is biased and unable to understand the complexity of society [8]. Thus, those views of some are far beyond perceiving the matter that women's arduous efforts at preventing global problems and securing peace by any means [9] are going beyond wars and conflicts and looking at what humanity regardless of gender can do to ensure a sustainable future. It is due some researchers' views that women take more holistic approach than men to achievement of a sustainable environment and development that is ensured by inclusive models of democracy, human rights and liberties in a less violent world [10]. To this end, women combine science, social responsibilities and political activities by any means with a strategy of not only protecting the existing peace, but also securing and strengthening the very basis for peacefully sustainable future [11]. In this vein, the main aim of this study will be efforts to explore how promoting peace through a feminized-language of resolution would become a great remedy at ensuring a more-livable world.

II. METHODOLOGY

This study is mainly a qualitative research based on a literature survey of secondary data resources involving scientific published or electronic books, articles, essays, thesis and reports. In addition, we conducted an extensive review of policy documents and government initiatives. In the study, research techniques such as document analysis, content analysis and discourse analysis methods will be used in addition to advanced social sciences research methods like hermeneutics and dialectic.

III. LITERATURE REVIEW

The subject of women in peacebuilding has received much attention in research. For example, Agbalajobi [12] has done

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research that focuses on women's roles in peacebuilding in Africa in which she is doing a case study of Burundi. The author outlines the common understanding that women are often seen as victims in conflict-areas. Agbalajobi, however wants to outline the other roles women can play in conflicts they may also be part of, for example, as soldiers, supporters, informants and so on, where women rather should be perceived as agents in conflict and peace making than as victims. Discussing these issues further are Schirch and Sewak [13], who argue that since women so far, have had little participation in peace negotiations and peacebuilding, women's interests have been ignored often based on the perception that women's role is that of the victim. The authors also discuss the sociological theory about sex and gender that we are not born into men and women but masculinity and femininity is socially constructed and taught during childhood and throughout life, a theory that will be developed in the section below and used in this research. Schirch and Sewak also underline the need to adapt to an intersectional perspective where more than just being a woman or a man determines on how you are going to act. They argue that the importance of women in peacebuilding should not consist of women being seen as more naturally peaceful and thus being abler to create a sustainable peace, instead women need to be part of the peacebuilding for the simple reason that they are approximately half of the population. Furthermore, they consider the different activities women do in peacebuilding. These include; waging conflict non-violently, building capacity, reducing direct violence and transforming relationships. The authors outline that women especially engage in four kinds of peacebuilding, for example they work as advocates and activists for peace, they pursue democracy and human rights, they are peacekeepers, relief aid workers and work as mediators, counsellors and policymakers and in education. Furthermore, the authors discuss the importance of moving beyond the idea of women as victims since this creates hardship for the women to engage in the peace-process as workers and having influence in the negotiation processes, an idea that will influence this research further in this chapter.

Jordan [14] examines the phenomenon that women who are present in peacebuilding seldom get the same recognition as the men, who are present. She says that women are to a large extent present, however, they are not as visible. Jordan argue that the women who work in peacebuilding often use their knowledge and power to help other women and increase their influence. This is further explored by Manchanda [15], who discuss that since women are the subordinate gender and thus disempowered and is not recognized in the same way as men. Manchanda cites the United Nations Development Fund for Women (UNIFEM, 2004), who says that women are recognized as important in peacebuilding but in the area of reconstruction they are not seen as legitimate, often based on the previous discussed idea that women are seen victims.

Pankhurst [16] highlights the issue that in recent years' women have been included more in the process to achieve peace, unfortunately this have not lead to a better life for women in the aftermath of a conflict. She discusses the widespread assumption of women being advocates for peace and peaceful by nature. She underlines that the assumption of the roles of women and men, where the two are opposite to

each other. Based on this, the author concludes that work performed by women is often seen as feminine and empowerment of women in working life is enhancing and extending the pre-existing female work. This in turn makes women who have grown up and live in these societies take on these type of works and keep on performing these types of work. This will lead to, according to Pankhurst, that the effectiveness of the peace process is limited. The authors, mentioned above, all focus on women being perceived as victims after a conflict where they are the ones who suffer from sexual abuse, rape and being displaced due to the conflict. However, they also conclude that this opinion of women in the aftermath of a conflict is highly controversial since women often partake in the conflict in various ways, bringing the conflict forward or working towards peace. This however, they seldom get recognition for and are therefore often stuck in the perception of them as victims.

To understand the issue further it can be considered through the concept of agency. A commonly used definition is that agency is the capacity humans have to shape the circumstances for their own life and how the actions people think of as free, untinted by others, often are a result of the structures in the society one live in [17]. One example of this is that women are seen as victims of war rather than agents of change. This is based on the general assumption that war is gendered and often ascribed as a masculinized story. The discourse of agency is depreciated from what it means to be a woman [18]. To understand the concept of agency, it is important to discuss power and how power is linked to the masculine; therefore, women can only be subsidiary partners of power to the men. Women can get access to the spheres in which power is exercised, however, this is in the male sphere and women cannot get equal access to the power [19].

Laura Shepherd [20] discusses women as agents of change rather than victims of violence. She argues that previously many scholars argue that men are the perpetrators while women are the victims of violence in conflicts. However, Shepard means that the masculinized story of war does not describe the complexity of men's and women's role in war. Further, she means that by only letting women be represented as victims of violence undermines their agency and thus the development of peacebuilding activities, in which women can participate and all their experiences of conflict is addressed is undermined. Another scholar who have used the concept of women as agents in conflict is Rita Manchanda [21]. She, as Shepherd wants to change the way women are perpetuated in conflicts, where women are solely seen as victims, which she means is not the truth. Women in conflicts often take part as decision makers, negotiators, peace activists and participating in the military struggle. The struggle she means is to start identifying women as agents instead of victims and strengthen their roles as agents for social transformation.

IV. CONFLICT, RESOLUTION AND PEACE-MAKING

Conflict has occurred in the past, is happening in the present, and will occur in the future. It can occur globally, as well as regionally, nationally, communally, within families and among individuals. Peace making is designed to address the causes of conflict and the grievances of the past. It must involve justice to promote long-term stability, human security and equality. Thus, the causes of conflict, while complex, do

not differ greatly from those in other developing countries, most particularly countries with a strong colonial heritage, when, as Douglas [22] discusses, the creation of new nation states incorporated very different tribal and ethnic groups. Some causes are universal, including perceived grievances between ethnic groups — usually over resources and power. These are often linked to historical differences and demands by minority ethnic groups to maintain their language, culture and identity. Identity may include demands for a state based on a specific religious affiliation [23].

A conflict on its part signifies a general state of hostility between parties. Conflicts are often unfocused, and particular disputes arising from them are often perceived to be as much the results as the cause of the conflict [24].

Conflicts and disputes are inevitable in domestic and international relations. Human beings often want the same thing in a situation where there is not enough of it to go round. Admittedly, one side may change its position, extra resources may be found, or on looking further into the issue it may turn out that everyone can be satisfied after all. It is obvious that it is difficult for society to evolve without disputes [25].

It is therefore assumed that disputes or more strictly, the conflicts from which disputes emerge are not wholly undesirable but have certain valuable characteristics, and that the proper function of law and other techniques is to manage, rather than to suppress conflicts. Recourse to law offers certain short or long-term benefits to one or more of the parties to the disputes. Thus conflicts or better still disputes, whether between States, neighbours, siblings or entrepreneurs must therefore be accepted as a regular part of human relations and the problem is what to do about them [26].

Consequently, a basic requirement is a commitment from those who are likely to become involved, that is to say, from everyone, that conflicts or better still disputes to be more specific will only be pursued by peaceful means. Within States, the principle of peaceful settlement was established at an early stage and laws and institutions were set up to prohibit self-help and to enable their differences to be settled without disruption of the social order.

In 1945, however, with the consequences of the unbridled pursuit of national objectives still fresh in the memory, the founding members of the United Nations agreed in article 1(I) of the charter that one of the purposes of the United Nations, "is to bring about by peaceful means, and in conformity with the principles of justice and international law, adjustment or settlement of international disputes or situations which might lead to a breach of the peace". Among the principles in accordance with which the Organization and its members are to act in pursuit of such purpose are that, all members are to refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any State, or on any other manner inconsistent with the purpose of the United Nations, and that they shall settle their international disputes by peaceful means in such a manner that international peace, security and justice are not endangered [27].

Peace and conflict studies are important in this context to unserstand theoritical and conceptual basis of conflict and resolution as well as peace-making. Those notions are concerned with the transformation or resolution of conflict and the building of amicable and positive peace. However, successful and effective conflict resolution and transformation requires thorough and systematic understanding of the root or remote cause of the conflict, which would consequently provide the fundamental ground, on which strategies for resolution, prevention, and intervention can be mapped-out by conflict resolution and negotiation experts, peace researchers, activists, agents, and/or concerned institutions. In order to understand peace and conflict resolution mechanisms, it is important to look at the theories underpinning the subject. The theories must be such that they help in the understanding of the causes of conflicts [28].

In a globalised world we must learn how to live, work and exist together - in peace, with an appreciation for human rights and diverse cultures and perspectives. Peace-building is a term used within the international development community to describe the processes and activities involved in resolving violent conflict and establishing a sustainable peace (sustainable future). It includes conflict transformation, restorative justice, trauma healing, reconciliation, development and leadership. It is similar in meaning to conflict resolution but highlights the difficult reality that the end of a conflict does not automatically lead to peaceful, stable social or economic development.

A number of national and international organizations describe their activities in conflict zones as peace-building. Peace building does not end with disarmament, ceasefire, election monitoring, restoration of democracy, repatriation of refugees or even monitoring conflicts through peacekeeping forces but lies at the success of societal stability and reconstruction — such as restoring human rights and the economic and social development of 'all' the people.

More importantly, it is about prevention of future wars and violence. Both human rights advocates and conflict resolvers believe that prevention is the best approach to violent conflict or widespread human rights abuses. Especially societies in which ethnic, religious, or political tensions run high; where there is a history of past conflict or rights abuses; where the institutions of civil society designed to provide alternatives to violence are weak, corrupt, or nonexistent; or that are wracked with political or economic instability, are fertile ground for the outbreak of violence or repressive rights abuses [29].

Therefore, escalating violence in many conflicts and the very different roles women and men have played in dealing with it have highlighted the need for a deeper understanding of ways in which conflict might be reduced in the future, how peace can be achieved more quickly, and better support provided for victims of conflict. This situation highlights the complexities that underlie national conflicts and that hardship and trauma do not end with a peace agreement [30].

V. WOMEN IN CONFLICT MEDIATION: WHY IT MATTERS

As Dag Hammarskjold, Nobel Peace Prize Winner of 1961, emphasized; "The pursuit of peace and progress, with its trials and errors, its successes and setbacks, can never be relaxed and never abandoned", more than a decade after United Nations Security Council Resolution 1325 (2000) was unanimously adopted, the striking absence of women from formal peace negotiations reveals a troubling gap between the

aspirations of countless global and regional commitments and the reality of peace processes [31].

However, it has been 33 years since the adoption of the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), 30 years since the UN General Assembly's Declaration on the Participation of Women in Promoting International Peace and Cooperation, 17 years since the UN convened the Fourth World Conference on Women and participating governments issued the Beijing Declaration and Platform for Action, and 12 years since resolution 1325 (2000) made women's participation in all aspects of peacekeeping, peacemaking and peacebuilding part of the remit of the Security Council [32].

This imperative has been reiterated in subsequent resolutions, including 1820 (2008), 1888 (2009), 1889 (2009), and 1960 (2010), and in several reports of the Secretary-General on mediation and on women, peace and security. However, gender equality advocates government, and civil society actors have highlighted peace processes as a strategic entry point for the implementation of resolution 1325 (2000). The decision of the Norwegian Nobel Committee to award the 2011 Peace Prize to Ellen Johnson Sirleaf, Leymah Gbowee and Tawakkul Karman for their non-violent struggle for the safety of women and for women's rights to full participation in peacebuilding processes reaffirmed the centrality of women's contribution to peace, and the essential connection between democracy, justice, and gender equality [33].

For the first time in its history, the Nobel Committee referred to UN Security Council resolution 1325 in its statement, reiterating the decisive importance of women's leadership in international peace and security. On 22 June 2011, the UN General Assembly also unanimously approved the first resolution (65/283) on peace mediation that has ever been adopted by this body. This resolution encourages strengthening the position of women in conflict resolution efforts and underscores the need for further engagement with civil society to ensure this occurs. Yet, women's participation in peace processes remains one of the most unfulfilled aspects of the women, peace and security agenda. Our review of a sample of 31 major peace processes since 1992 shows that women represent a strikingly low number of negotiators, and that there has been little appreciable increase since the passage of resolution 1325 (2000).

Women's participation in negotiating delegations averaged 9 per cent in the 17 cases for which such information was available. 4 percent of signatories in the peace processes included in this sample were women, and women were absent from chief mediating roles in UN-brokered talks [34]. At the peace table, where crucial decisions about post-conflict recovery and governance are made, women are conspicuously underrepresented. Some of the most noteworthy examples of women's participation in peace negotiations took place before the Security Council adopted this resolution on 31 October 2000. In the Republic of El Salvador in the 1990s, women were present at nearly all the post-accord negotiating tables. One technical table, the Reinsertion Commission, was formed by six women and one man. In the end, women made up one third of the beneficiaries of land redistribution and reintegration packages, which corresponded roughly with the percentage

of female members of the Farabundo Martí National Liberation Front (FMLN), either as combatants or as collaborators [35]. In the Republic of South Africa in the mid-1990s, the Women's National Commission demanded that 50 percent of participants in the Multi-Party Negotiating Process be women and succeeded in establishing that one out of every two representatives per party had to be a woman, or the seat would remain vacant. Approximately 3 million women across the country participated in focus groups and discussions, and a 30 percent female quota was adopted for the upcoming elections [36].

However, despite the historical exclusion of women from negotiating tables and security apparatuses, the evidence of women's contributions to conflict prevention and resolution is growing. Several empirical analyses confirm that women offer unique, substantive, and measurable contributions to securing and keeping peace. Evidence shows that security efforts are more successful and sustainable when women contribute to prevention and early warning, peacemaking, peacekeeping, and post-conflict resolution and rebuilding. A qualitative evaluation of women's influence in recent peace processes—notably in Guatemala (1996), Northern Ireland (1998), Liberia (2003), and the Philippines (2014)—further illustrates the critical role that women can play in resolving conflict and promoting stability. For example, in Northern Ireland, women secured a seat at the peace table in 1997 by forming a women's cross-party political grouping and winning some seats in the election. The Northern Ireland Women's Coalition successfully built bridges between Catholics and Protestants and promoted reconciliation and reintegration of political prisoners [37].

VI. WOMEN'S ROLE IN PEACE-BUILDING: A FEMINIZIED LANGUAGE OF RESOLUTION

A country's post-conflict period is a critical time for including gender equality and ensuring women's involvement in the political processes that will subsequently shape the state [38]. If new standards and conditions are to solidify into substantive changes in the post-conflict era and sexual slavery is to end, women must be involved in defining these new standards throughout the peace process [39]. Yet, women are far too frequently left entirely out of peace discussions regarding the future of their nation, the drafting of peace accords, and the implementation of peace accords in the reconstruction period [30].

Recurrent and emerging armed conflicts, expanded terrorist and extremist networks, increased targeting of civilians, and record levels of mass displacement have defined global security in the twenty-first century. Data shows that standard peacemaking methods have proved ineffective at addressing these trends: nearly half of the conflict resolution agreements forged during the 1990s failed within five years [41]. Recidivism for civil war is alarmingly high, with 90 percent of civil wars in the 2000s occurring in countries that had already experienced civil war during the previous thirty years [42]. New thinking on peace and security is needed [43]. A growing body of research suggests that standard peace and security processes routinely overlook a critical strategy that could reduce conflict and advance stability: the inclusion of women. Evidence indicates that women's participation in conflict prevention and resolution

advances security interests. One study found that substantial inclusion of women and civil society groups in a peace negotiation makes the resulting agreement 64 percent less likely to fail and, according to another study, 35 percent more likely to last at least fifteen years [44]. Several analysis suggest also that higher levels of gender equality are associated with a lower propensity for conflict, both between and within states [45].

Women's participation in formal peace processes also contributes to the achievement and longevity of peace agreements. A qualitative review of forty peace and constitution-drafting negotiations since 1990 found that parties were significantly more likely to agree to talks and subsequently reach an agreement when women's groups exercised strong influence on the negotiation process, as compared to when they had little or no influence [46]. Another study, which analyzed 181 peace agreements signed since 1989, found that when women had participated in peace processes as witnesses, signatories, mediators, and/or negotiators, the resulting agreement was 35 percent more likely to last at least fifteen years [47]. Additional research examined all peace agreements in the post–Cold War period and found that participation of civil society groups, including women's organizations, made a peace agreement 64 percent less likely to fail [48].

Analysis of prior peace processes suggests that women's participation increases the likelihood of an agreement because women often take a collaborative approach to peacemaking and organize across cultural and sectarian divides [49]. Research suggests that such an approach, which incorporates the concerns of diverse demographics (e.g., religious, ethnic, and cultural groups), affected by a conflict and with an interest in its resolution—increases the prospects of long-term stability and reduces the likelihood of state failure, conflict onset, and poverty [50]. Numerous case studies have documented instances where women built coalitions across ethnic, political, religious, and sectarian divides, including in Afghanistan, Colombia, Guatemala, Iraq, Northern Ireland, Somalia, and South Africa [51]. In Afghanistan, for example, women, who made up only 20 percent of the delegates to the 2004 constitutional convention, successfully reached across ethnic lines to push for a commitment to equal rights for all Afghan citizens and to support efforts by the Uzbek minority to gain official recognition for its language [52]. Even in cases where women have limited or no access to formal governmental talks— known as track one negotiations—and instead are limited to track two nongovernmental talks, as in Guatemala, women's groups often use backroom roles to facilitate input to formal, track one negotiators and provide insight from marginalized groups that may otherwise not be heard. Including women at the peace table can also increase the likelihood of reaching an agreement because women are often viewed as honest brokers by negotiating parties. This perception is rooted in the reality of women's exclusion: because women often operate outside existing power structures and generally do not control fighting forces, they are more widely perceived to be politically impartial mediators in peace negotiations, compared with men [53]. The proposition that women are seen as trustworthy negotiators is empirically supported. For example, in-depth interviews with negotiators from the

Burundi, Northern Ireland, and South Africa peace processes found that the ability of female representatives to build trust, communicate, involve all sides, and settle disputes encouraged parties to negotiate and compromise [54]. Recent history suggests that women are rightfully considered reliable peace brokers: a review of forty peace processes since 1990 found that no women's group sought to derail a peace process. Women often advance peacemaking by employing visible and high profile tactics to pressure parties to begin or recommit to peace negotiations, as well as to sign accords. Women's groups have successfully staged mass actions and mobilized public opinion campaigns in many countries to encourage progress in peace talks, with notable examples in Burundi, Colombia, Democratic Republic of Congo (DRC), Liberia, and Somalia. In DRC, for instance, 40 female delegates to the 2002 Sun City talks formed a human chain to block the exits from the committee room, insisting that delegates remain until the signing of a peace agreement [55]. In Somalia, women observers at the 1993 Conference of National Reconciliation staged a public fast until an agreement was reached—a pressure tactic that produced a peace plan twenty-four hours later. Ensuring diversity at the negotiating table has also been shown to contribute a breadth of perspectives that can advance conflict resolution. Because women tend to have different social roles and responsibilities than men do, they have access to information and community networks that can inform negotiating positions and areas of agreement. In 2006, for example, when negotiations in Darfur deadlocked over control of a particular river, local women advised the male negotiators—who were rebel group leaders living in the diaspora—that the river in question had dried up several years prior [56]. Women had access to critical knowledge—in that case, borne of their disproportionate responsibility to fetch water—that helped to break an impasse. Women's inclusion in peace talks not only advances the likelihood of achieving a resolution but also contributes to the sustainability of an agreement, partly because women are more likely to raise social issues in negotiations that help societies reconcile and recover. Evidence suggests that women frequently raise issues in conflict resolution processes beyond military action, power-sharing arrangements, and territorial gains, instead introducing political and legal reforms, social and economic recovery priorities, and transitional justice concerns that can make agreements more durable [57]. The International Crisis Group's research in DRC, Sudan, and Uganda indicates that during peace talks, women often raise issues of human rights, security, justice, employment, education, and health care that are fundamental to conflict resolution and post-conflict rebuilding. In the Northern Ireland peace negotiations, for example, women pushed to include provisions on social and economic priorities, such as integrated housing and education; in Darfur, women delegates recommended the inclusion of provisions on food security, protection for internally displaced persons and refugees, and the prevention of gender-based violence, all of which advance long-term stability [58]. Women's inclusion in conflict resolution processes also increases the chance that peace agreements will address the particular needs of vulnerable groups in post-conflict situations, thus promoting reconciliation; for example, women are more likely to advocate for accountability and

services for survivors of conflict-related sexual violence [59].

VII. Conclusion

With the implementation of UNSC Resolution 1325 the role women play for peace and security was affirmed. Since the implementation of the resolution, almost two decades ago, more than 400 peace agreements has been signed. Since then one can assume much has happened regarding women and their role in the peace process. It can thus be valuable to explore if the implementation of the resolution has created a larger acknowledgement of women in the peace agreements and to see if women are limited to and by the roles that they are assigned to in the peace agreements in their peace work.

This research showed that even though many scholars and the United Nations with the adoption of resolution 1325 have highlighted the importance of incorporating women in peace agreements and their importance in peacebuilding, this is far from the reality. This however, does not implicate that women, even though they are often treated as it, must or even should, be considered to be victims. As was highlighted from the case studies chosen, women are sometimes mentioned in the peace agreements and their roles in the society are mentioned. However, women do engage in more activities that the ones that are mentioned in the peace agreements and the work they engage in not only follow the normative gender roles of women. Instead, women are present and engaged in many, if not all types of peacebuilding. The findings also show that women often have a leverage in their roles as women when it comes to reconciliation and mediation. This is because they have the ability to speak with women in other tribes due to family bonds that exist cross tribes due to marriage. This type of bond is not something, which exists for the men since they live out their whole lives in the tribe where they are born. In the cases where women are limited by the gender roles in their society to participate in peace-building they use these gender roles as a way to affect the men.

This research thus indicates that women are not limited by the roles they are assigned to in peacebuilding and also that they are following normative gender roles concerning the work they engage in. The study shows that women, even though not presented as it in the peace agreements are agents of change and should thus have a larger official role in the peace agreements since previous research also has shown that by incorporating women, the peace is due to last longer. This research has contributed to an understanding concerning which areas women participate in, in the peacebuilding process and why women's role thus can and should be implemented in the peace agreements. This, since their role as agents for change in the aftermath of conflict, has shown to have quite the impact on the peace process. By understanding that women do not follow the roles they are assigned to one can see the opportunities women possess to make a difference in the society and how important it is to support the women in their peacebuilding process. This since they are active in changing the society after a conflict. By also understanding that women neither are only victims but rather victims as well agents, it is important to incorporate their agency in the peace agreements since it will enable women to work with peacebuilding further and implement an even further change. By instead implementing a policy that demand a minimum of women participating in the peace process, or having women's groups discussing women's role and how they actively can engage in the peace reconciliation process and the peacebuilding, women's agency in the aftermath of conflict can be used to a larger extent [60].

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Early Republican Period of Turkey in Yeşilçam Cinema

Deniz Gürgen Atalay

Abstract—Among the historical Yeşilçam dramas in Turkey, the films that narrate the tales of the Independence War and the Foundation of the Turkish Republic reserve a respectable portion. There are 64 films produced between 1923 and 1974 that represent the historical period. The dominance of nationalist discourses on the historical films to narrate the Indepence War and the Foundation Process in Yeşilçam Cinema broadly reflects the discourse of the official historiography of Turkish Republic. The antagonistic representation of the non-Muslim groups and ethnic diversities in Ottoman society in the historical Yeşilçam films of Independence War would be interpreted through the impact of nationalism in Turkish politics. The prominence of the nationalistic discourses to structure the filmic historiography of the Early Republican Period in Yeşilçam Cinema exhibits the impact of the official state ideology on the culture and society in Turkey until the 90s.

Keywords—Historiography, historical films, early republican period of Turkey, Yeşilçam cinema.

I. INTRODUCTION

AMONG the historical dramas of Yeşilçam Cinema in Turkey the films that narrate the tales of the Independence War and the Foundation of the Turkish Republic reserves a respectable portion. There are 64 films produced between the years 1923 to 1974 that represent the historical period. Yeşilçam is the name given to the mode of popular film production in Cinema of Turkey. The Yeşilçam mode of production springs in the last years of Early Republican Period and gradually diminishes through the 1980s.

The Independence War is the struggle to remove the European Occupation that follows the truce of Mondros in 1918. The Lausanne Contract signed with the parties to participate in war in 24th July 1923 marks the official ending of the war. The Independence War is followed with the foundation of the Republic of Turkey [28]. The Modernization and Westernization project as the key structure of the Republican Developmentalist state ideology is implemented through the Kemalist reforms. The period that covers the Independence War, Foundation of the Republic and the Kemalist reforms is called the Early Republican Period. The period starts with the beginning of Independence war whereas the end of the period is marked with the death of Mustafa Kemal Atatürk in 1938, the chief commander of war and the founder of the Republic.

Once the mainstream film narrates a historical event, the representation of the past bears the characteristics of the

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contemporary culture in its historiographical practice. Hence the filmic representation of history in mainstream films reflects the contemporary perspectives in its expression. By the same token, the historiographical performance of commercial films influences the historical consciousness of society both through the effect of filmic experience and their wide circulation. The representation of past in mainstream historical films are bound to shift in accordance with the emergent discourses to trigger social change.

The dominance of nationalist discourses on the historical films to narrate the Indepence War and the Foundation Process in Yeşilçam Cinema broadly reflects the discourse of the official historiography of Turkish Republic. The antagonistic representation of the non-Muslim groups and ethnic diversities in Ottoman society in the historical Yeşilçam films that represent the Independence War would be interpreted through the impact of nationalism in Turkish politics. The prominence of the nationalistic discourses to structure the filmic historiography of the Early Republican Period in Yeşilçam Cinema exhibits the impact of the official state ideology on the culture and society in Turkey until the 90's.

II. THE FILMS OF WAR AND REPUBLIC

The prelude of cinema in Istanbul begins with the private screenings in Ottoman Palace for II. Abdülhamit soon followed by public screenings in Galata beer halls around 1896 [1]. The early practices of filmmaking are made through the productions of MOSD (Cinema Department of Military) founded in 1915. The purpose of the institution was to maintain the filmic documentation of the military operations and significant maneuvers of the army and organize screenings to disseminate them [1]. Although the exact number of the films produced by MOSD is uncertain, the footages from the World War I battlefields are frequently utilized in films about the Indepence War that are produced in the following decades [2].

Turkish Republic is founded under the leadership of Mustafa Kemal Atatürk in 1923. Mustafa Kemal emerged as a public figure through his military accomplishments during WWI fighting in Ottoman fronts. The initiation of the Foundation Process begins with the Independence War (1919-1922) that triggers the tumble of the Ottoman Empire and defines the initial borders of the country. The early Republican Period encompasses the Independence War, Foundation of the Turkish Republic and the implementation of the Republican Reforms. The decease of Mustafa Kemal Atatürk marks the end of the Early Republican Period.

Turkish Nation as an essential component of the project of

the Republic of Turkey molds through the virtues of modernization, nationalization and westernization. The 600 years of dynamic conquest politics of Ottoman Empire brought about the multi-cultural, multi-ethnic and multi-religious structure to the society through intersecting and leaguing together with various communities. The foundation of the Turkish Republic over the monarchic ruling practice of Ottoman Empire required the constitution of a national identity that is unified thus appropriated for the governance in a democratic style.

The construction of the Turkish nation in a unified, modern and westernized form was held through the cultural regulations that are denominated as Kemalist Reforms. The modernist reforms compromised a huge area in almost every social habitat. The implementation of the reforms was directed towards the construction of a nation, which is totally separated from Ottoman virtues and modern in the sense of Western civilizations.

During the foundation process of the Republic in 1920's, the state held regulations aimed to transform the cultural field as an essential part of the modernization project designed to align with the Western civilizations. The exclusion of the Ottoman and Islamic characteristics from the culture was the significant target of the Republican elite's project of building a national identity [3]. The transformative applications covered a wide cultural field involving music in great extends as well as plastic and applied arts. The state institutions are founded to educate and support the artistic practices in Western style. However, the series of modernist implementations practiced in arts and culture during the Early Republican Period ignored the field of cinema despite its high capacity to be utilized as a political instrument [3]. Through the lack of state support and administration, the cinema in Turkish Republic developed in interdependency to the audience and private entrepreneurship and hence in Arslan's emphasis reflected the culture of the masses [3].

The mode of film production in Turkey that accommodated the commercial characteristics is named as "Yeşilçam" (Green Pine) — from the name of the street where production companies reside. Yeşilçam Cinema in Turkey blossomed with the 1940's and had its golden years for number of productions and box office numbers during 1950s and 60s. It has gradually lost its glory during the 70s and diminished through the 80s [1], [3]. There is certainly a complex relation of conditions at play to culminate in the decrease of film production through period that marks the arguable vanish of Yeşilçam tradition. The turmoil in the Turkish politics to reflect the social and economic practice before and in the aftermath of the 80's coup is significant to designate the period. During the time, the widespread expansion of television along with the emergence of videocassette technology relocated the cinematic entertainment in the space of household practice. Consequently, the number of film theatres exhibited a substantial decrease through the 80s [3].

The revival of film production in Turkey in 1990's emerged as a ground that reflected the diversity and conflict in society. The ethnic, religious and cultural identities that have been excluded from the Turkish national identity previously emerged in the narratives of the films as a significant characteristic of Turkish Cinema in 90s. The representation of cultural diversity in films is inherently related with the globalization of Turkey along with the free market economy. The globalization tendency that transforms the cognition of political, economic, social and cultural practices in direct association to national values is significant to interpret the 90s in Turkey. In terms of film production and audience, the period is designated as the "The New Cinema of Turkey". In the scope of this study on the filmic historiography of the Early Republican Period the films produced during the Yeşilçam Period will be at focus. The films produced after 90s to narrate the Early Republican Period call for a different theoretical approach to evaluate the impact of nationalism during the period of globalization in Turkey.

Despite the disregard of the reformist project on the advance of film production during the early years of foundation, the Republican state arguably attributed quite an attention to the filmic representation of the Independence War and the Republican history both via the narrative forms of fiction and documentary.

The documentary *Ankara, Türkiye'nin Kalbi* (Ankara the Hearth of Turkey) (1933) is designed to narrate the successful progress of the Republican reforms in the 10th year anniversary of Turkish Republic. For the production of the film the state officials invite Soviet filmmakers Sergei Yutkevich and Lev Arnstam [4]. The documentary follows the Soviet committee's visit in cities of İstanbul and Ankara in a parallel manner with the arrival of masses from all over Anatolia to join the celebrations. The film portrays the transformation of Ankara from a barren rural area to a glorious city center with grandiose modern architecture. The representation of the development of Ankara from a wasteland to a capital is utilized to signify the glorious progress of the country under the Republican rule. The poetic form of the documentary emerges through the circulation of images to flow along with the music. The soundtrack of the documentary that accommodates the works of both Soviet and Turkish compositors, contributes the epic style of the narrative. The limited voice-over on the images exposes the agitprop aesthetics of the Soviet cinema during the period. The climax of the film culminates with Mustafa Kemal Atatürk's 10th year speech [4].

The archival footage of the Independence War shot by MOSD involving the battlefields exposes the importance attributed to the filmic documentation of the struggle for historiographical purposes. After the War, MOSD produces documentaries with these footages to depict the battlefield. The Republican state values and supports the documentaries like Fuat Uzkınay's "*İzmir'in Zaferi*" (The Victory of İzmir) and Cezmi Ar's "*İşgal ordularının İstanbul'u Terki*" (Occupation Armies' Defection from Istanbul). Turkish film historian Agah Özgüç expresses in his article about the Independence War Films that Mustafa Kemal Atatürk signifies these documentaries as valuable historical assets for the maintenance of young generations' engagement with the

Republican ideals [5]. Özgüç denotes Atatürk's fierce reaction against the inadequate representations that fail to accomplish the realistic depiction of the battlefield. In the article he signifies Atatürk's attention on the visualization of the war. Atatürk expresses his frustration in the letter to criticize the utilization of his still images to substitute the live ones that are missing from the footage in the documentary "*İstiklal*" (Liberty) (1937). In the letter, he signifies that he acknowledges participating in the reenactments of the Independence War as the commander of the battlefield as a national duty he is responsible of to serve the country [5].

Özgüç states that Atatürk also requested for the fictional depictions of the Independence War and supported the production of historical films alongside the documentaries. The first fiction film to narrate the story of the Independence War "*Ateşten Gömlek*" (Shirt of Flame) by Muhsin Ertuğrul in 1923 produced on Atatürk's order. Ateşten Gömlek is an adaptation from a novel with the same name by Halide Edip Adıvar published in 1922 [5]. Mersin notes that the historical films about the Independence War and the foundation of the Republic produced until the 1970's are mostly adaptations from the novels to narrate the period [2]. "*Ankara Postası*" (The post for Ankara) is the second historical fiction film by Muhsin Ertuğrul released in 1928 following *Ateşten Gömlek*. Adapted from Reşat Nuri Güntekin's theatre play "*Bir Gece Faciası*" (A Night's Disaster) that he originally adapts from François De Currel's play, *Ankara Postası* narrates the national resistance against the imperialist forces. The third film produced during the Early Republican Period is "*Bir Millet Uyanıyor*" (A Nation is Awaking) directed by Muhsin Ertuğrul, the single director of the period in 1932. In Özgüç's account the first three Independence War films evokes great excitement in the audience and in Ertuğrul's claim the Turkish society positively responds to these films to an extend far beyond their interest for foreign films [5].

The economic straits due to the World War II period culminates with the break in the production of Indepence War films for more than a decade. Şakir Sırmalı's "*Unutulan Sır*" (The Forgotten Secret) (1946) is followed by Ferdi Tayfur's "*İstiklal Madalyası*" (The Medal of Liberty) (1948). İstiklal Madalyası is significant for the incorporation accomplished with the army during the production and hence is remarkable for its portraiture of the combat scenes [5]. In 1949 two Independence War films are produced. "*Fato-Ya İstiklal Ya Ölüm*" (Fato- Liberty or Death) and "*Vurun Kahpeye*" (Strike the Whore) (1949). In Özgüç's interpretation, "*Vurun Kahpeye*" was Yeşilçam's acclaimed director Ömer Lütfi Akad's first film and it stands out in its cinematographic and narrative qualities [5]. Narrating the story of an idealist Republican woman's struggle with the Greeks and the conservative anti-Kemalist groups in the village where she teaches, the film is adapted from Halide Edip Adıvar's novel with the same title. Orhan Aksoy produces the first remake of the film in 1964. Halit Refiğ produces the second remake of the film in 1973 to commemorate the 50th anniversary of the Republic.

Twenty-five films that took place during the Independence War and the foundation process are shot between the years 1951 to 1960. The most significant ones among them for Özgüç were Lütfi Akad's "*İngiliz Kemal*" (British Kemal) (1952), Osman Seden's "*Düşman Yolları Kesti*" (The Enemy Blocked the Way) (1959) and Atıf Yılmaz's "*Bu Vatanın Çocuklar*" (1959) (The Children of this Country) [5]. The battle between the public resistance against the occupational forces in Anatolia and the traitors from inside to collaborate with the enemy is the common subject to repeat in the majority of the films including the three mentioned above [5]. The remake of *İngiliz Kemal* with its strong emphasis on the codes of nationalism is produced in 1968 this time directed by Ertem Eğilmez. Another course of war films in Yeşilçam to reproduce the nationalistic discourses of Independence War films emerged during the 1950's with the involvement of Turkey to Korean War through United Nations [5].

In 1964 Atıf Yılmaz and Atilla İlhan adapts Mükerrem Kamil Su's novel "*Ateşten Damla*" (The Drop of Flame) to the screenplay with the same title. The film that stands out with Memduh Ün's performance as the director exhibits the agonies of the Independence War in a realistic yet intense way [5]. The first color film "*Çanakkale Arslanları*" (Çanakkale Lions) (1964) by directors Turgut Demirağ and Nusret Eraslan represents the Indepence War. The film has the highest budget in all of the Independence War films that are produced to that date. With the extensive support of the army, actual soldiers performed in film as extras along with the military vehicles that presented a vivid visuality. The initial decrease in the number of the Indepence War film productions emerges in consequence of the prohibition on the military to support the films in 1968 [5]. The films gradually decreased through the mid 70's along with the broad decrease in the number of Yeşilçam productions.

In terms of audience reaction and its reflection on the box office numbers, the Indepence War Films would not evoke much attention in Özgüç's interpretation. The only exceptions of the mediocre representations of the War in films are the first three works of Muhsin Ertuğrul and Lütfi Akad's "*Vurun Kahpeye*". Özgüç explains the success of the three early productions in 1920's and 30's with the recent memory of the War during the Early Republic that charges the public with nationalist sensations. *Vurun Kahpeye*'s success on the other hand grounds on director Lütfi Akad's performance to narrate the story with great intensity [5].

III. HISTORIOGRAPHICAL PERFORMANCE OF FOLM MEDIUM

In the historiographical performance, the historiographer finds and constructs a series of reasons that s/he attaches to the initiation of the event s/he is documenting. The storytelling, which is the art of expression, is required in historiography in order to transmit the information in a meaningful way [6]. The narration is necessary in thinking, writing and talking. The structuralist perspective in semiology focuses on the production of meaning in language [7]. As the context of syntagm points out, the expression of a meaning depends on the selection and placement of the words [7]. The process of

selecting, ordering and accentuating the words in an order to transfer the meaning would refer to narration.

In *What is History* E. H. Carr asserts that historians constantly endeavor to arrange the past experiences of human by attaching the cause-and-effect relationship to them [8]. In this perspective the history is acknowledged as a constitution composed through the organization of the past incidents in a causal order. The historical document needs to be narrative in order to be comprehensible. The construction of the narration involves the establishment of cause-and-effect relationship between the statements. Hence the comprehension of an historical document requires a bond of cause and effect that ties the events. The expression of the resulting event requires the identification of the prior event within a causal bond. Carr highlights the rejection of irrelevant data about past in the act of composing a logical and rational document [8].

The decision on the historical fact to build upon relies on its propriety to maintain the persistence of causality. "The causes determine the historian's interpretation of the historical process, and his interpretation determines the selection and marshaling of the causes" [8].

The evidential characteristic of historiography brings out the notion of reliability as a significant feature of the practice [6]. The historiography composed through the placement of historical facts in an order according to the historian's intention. As a part of the process "the historian fills in the empty gaps of historical facts with the facts of the past in order to maintain a cause-and-effect relationship" [6]. Therefore, the involvement of narration in historiography while arranging the facts, grounds on the aim of creating a comprehensible whole [6]. As Ernst Breisach points out in *Historiography: Ancient, Medieval & Modern*, that even though narration is an essential component of historiographical practice, it still deports the practice from a presumptive form that could express the past as it is [9].

In *Metahistory* (1975), Hayden White collates literature and historiography by testing the practice of historiography through the narrative form [10]. His analysis on the style of the historian and the form of text aims to prove that the historiography as a practice of installation. According to White, the diffrence between the novelist and the historian lies in their practice of approaching to the events, the historian finds the events, while the novelist invents them [6].

Rosenstone defines the historical film as just another medium to represent past, and hence he distinguishes it as historiography on screen [11]. In order to express the similarity of the constitutions of historiography and historiophoty, he highlights the methodology of historiography by means of narration and selectivity [11]. He argues that the historical film may not be history in the traditional understanding but is indisputably a tool for expressing historical knowledge. The historical film exhibits a strong expression of the past event since the historiographical performance of the film medium enables the representation of the past in an audio-visual way [11]. Challenging the commonly held idea that the written representation of history, in other words historiography, is the one factual and solid way

of shedding light on the past, Rosenstone follows the path that Hayden White opened through the post-structuralist critique of historical practice [11].

Tomasulo in "*I'll see it when I believe it*" considers the audiovisual shift in the representation of the historical event as a characteristic condition of the postmodern period [12]. Drawing also through the constructive nature of historiography, he signifies that Hayden White's conceptualization of historiophoty charges the filmic representation of history as a convenient tool to construct a polysemic interpretation of past. Raack's appraisal of the film medium in "*Historiography as Cinematography*" as a prosperous tool to perform historiographical practice goes beyond an approval. He designates the historical representation practiced by the film medium as the ultimate historiographical performance. He asserts that only the film would be able to recover and express the vitality of past [13].

Opposing the traditional monopoly of historical representation by the written practices of historiography, Rosenstone argues that a respectable portion of society's historical consciousness develops through historical films' representations of past events [14]. He points out the availability of film as a tool to express the meaning of past, he proposes historiophoty as a more accessible tool. By such portraiture he does not suggest overriding the written representation of history nevertheless the filmic representation of history deserves more attention and respect as a significant tool to perform historiography [14].

Rosenstone's approach is valuable for acknowledging the performance of historical films in the field of historiography. However, Rosenstone neglects the distinctive notion of the sensual experience that emerges through the diegetic practices of filmic historiography. As the contemporary postmodern accounts that Rosenstone grounds on frequently put forward, the practice of historiography grounds on the selection and establishment of historical facts in narration. In this context the possible discussions on solid historical accuracy and thus credibility would lack validity. Such perspective presents an inclusive tendency for various practices to perform. Through this point of view, the film medium stays on an equal level with the written forms of historiography [6].

I accept and espouse the equality of historical accuracy of the different practices of historiography, whether diegetic or non-diegetic, based on their constructed nature. However, the historiographical performance of the diegetic historical film deserves a distinct theoretical characterization through the generation of the sensual experience. The sensual experience of the past event that is presented by the filmic representation of history establishes in the historical consciousness of the audience. Through this function the historiographical performance of the diegetic film becomes a powerful element in the broad context of history.

Fictional films build their narratives through a diegetic space. The diegesis in Bunia's descriptive approach is the sphere where all the events occur, it is the genuine world design generated for that narration [15]. The diegesis possesses its own rational consistency within itself in means of

building a sphere of actuality that the events occur according to the causality within the rules of diegetic gravity. The rational consistency of the events in the narration is bond to the diegetic gravity hence the plot is legitimized in its own space of actuality independent from the restrictions of reality. When a historical event is represented through a diegetic structure, that event transports to an area that is free from the laws of historical accuracy. In spite of the fictitious diegesis that projects the historical event, the plot establishes on the historical conscious via the comprehension of the historical event through the sense of experience.

The historical event that is narrated through a diegetic form frequently reaches to a closural end in the final act. The narration responds to hooks it attached in earlier phases, the mysteries are solved, the protagonist reaches to his/her destination and eventually the catharsis rises through this closural feeling of completion. The diegetic representative narration of an historical event positions the comprehension to the field of sensation. Therefore I assume that the representative diegetic practices of historiography that the bestseller historical novels or mainstream feature films perform establishes the historical narrations into the field of experience.

In "Imaginary Signifier" (1974) Metz focuses on the mental experience of the diegesis explaining the formation of the suture and the state of the transcendent [6]. He endeavors to describe the unconscious part of the spectator that works toward constituting meaning. The concept of suture was developed in the work of Jean-Pierre Oudart 'Cinema and Suture' published with the name 'La Suture' in the Cahiers du Cinéma in 1969. The notion of suture explains the attachment of the spectator into the diegesis in the moment the base of plausibility locates on diegetic ground [16].

The identification with the camera and with the film in broad terms enables the acceptance of the diegesis as an alternative dimension of reality [17]. The perceptual performance of the spectator is physical and therefore actual, but the object of perception stays on the level of the imaginary. Through the acceptance of filmic diegesis as a constructed design of reality for the filmic world, the action would not disturb the spectator, even if it were extreme in nature. In this phase, the spectators identify with themselves in the act of perceiving. This identification enables the establishment of filmic continuity (the progress of the storyline) inside the spectator's own tracking. Through the identification with the film and the presentation of filmic events, the hooks of cause and effect simulate the reasoning of the spectator. The camera angles become the vision and the soundtrack becomes the hearing of the spectator. Handling natural reflexes like the turning of the head to the source of a sound or the squinting of the eyes to see more details through the control of the filmic presentation generates the state of transcendence [17]. In Metz's words, "the spectator *identifies with himself*, with himself as a pure act of perception (as wakefulness, alertness): as the condition of possibility of the perceived and hence as a kind of transcendental subject, which comes before every there is" [17].

Thompson and Bordwell in "*Film Art: An Introduction*" (2008) explain the conception of involvement in diegetic film through the formal elements of the medium. They emphasize the diegetic films' ability to maintain sensual involvement with the narrative. With their neo-formalist approach they analyse the narrative patterns of the diegetic film that present a structured experience to the spectator [18].

According to their perspective, the audience gains the filmic experience in consequence of the effort of making sense of the film. In this process they signify the formal elements of the film medium to transmit the sensual experience to the audience. Through their approach they assert that the form is the element that shapes the filmic experience [18].

In "*Genre Film: A Classical Experience*" Vivian Sobchack highlights the function of the balance in diegesis for sustaining the smooth audience comprehension [19]. Hence, although the design of the diegesis is free from the restriction of audience's own outer reality, it still needs to be consistent in its own gravitational rules to be plausible.

Along side the Neoformalist perspective of Bordwell and Thompson, the concept of the filmic experience relates to the wider context of phenomenological approach to film studies. Peritore in *Descriptive Phenomenology and Film* (1977) inquires the utilization of Husserl's phenomenological philosophy as a self-reflexive approach to film studies [20]. In "*A Phenomenological Aesthetic of Cinematic Worlds*" (2006: pp. 2-5) Yates departs from Heidegger's hermeneutical perspective in "*On the Origin of the Work of Art*" (1935) and explores the possibility of the film medium to conduct the experience of the filmic event to the audience [21].

In "*Feeling Cinema: Emotional Dynamics in Film Studies*" (2013) Tarja Laine locates the filmic experience to the field of emotion. She puts forward that the emotions emerge through the comprehension of the film coincides with the emotions constitute through real life experiences [22]. In "*Cinema as Second Skin*" (2006) she exposes filmic experience's effects on the body such as the goose bumps or simply laughing [23]. Laine's emphasis on the bodily experience of the film relates to the phenomenological perspective of Merleau Ponty that addresses the integrity of body and mind in the experience of the world.

When a historical event is represented through a diegetic structure, that event transports to an area that is free from the laws of historical accuracy. In spite of the fictive representation of the historical event, the plot establishes on the historical conscious via the comprehension of the historical event through the sense of experience. The sense of experience that diegetic practices locate their process of comprehension differentiates the effect of diegetic practices of historiography from the rest. Diegetic historical films operate on the field of experience through the identification they form between the spectator and the narration. The diegetic historical films reproduce the experience of the past and thus the audience experiences the sensuality of the past in the present. The historiographical performance of film medium gains significance through its ability to conduct the experience of past to the audience [6].

In her phenomenological approach, Vivian Sobchack asserts that the historical consciousness of a spectator would respectably be influenced by the representation of the past event practiced in the film [24]. The significant consequence of this influence would be the disappearance of the temporal space between the past and present. The historical representation performed through the diegetic practices transmit the sensual experience of the past period and hence annihilate the temporal space between the present and past. This occasion creates a blur in the cognition of history by dragging the meaning to the field of simultaneity [24].

Another layer of significance for the filmic practice of historiography emerges on the conductive nature of the film medium to the dominant tendencies of society. The commercial cinema in particular reflects the contemporary cultural tendencies through their supply-demand conscious discipline of production. The contemporary culture as a field of constant struggle involving discursive constitutions of various ideologies emerges in the narratives of commercial films. By the same token, the discourses embodied in filmic narratives form the individuals and groups in society through their influence on contemporary culture.

Douglass Kellner in *Media Culture* (1995) presents a detailed analysis on the interaction of ideology in society and artifacts of media culture [25]. As he points out, the formation of the products of media culture cannot be reduced to a simple process of reproduction of the discourses of the existing ideology in cultural forms of commodity. Nor such cultural products that are tailored to fulfill the audience demands would be consumed in a singular way. Since societies are not homegenic constitutions with identical characteristics, the thoughts, fears and demands of individuals in society would exhibit fierce differences. Hence the societies would react to cultural products in various forms of acceptance and rejection. A popular text in terms a blockbuster film or hit pop song might simultaneously be praised and irritated at by different groups in society. The popularity of a product in society hence points out to its intense circulation in media rather that the society's admiration for it. For Kellner the discipline of cultural studies seeks to conceive the altering forces of dominance and resistance in society through the interpretation of the products of culture [25]. The theoretical perspectives of cultural studies would enable the comprehension of the social dynamics at play through interpreting the cultural products that vividly circulate in society.

Despite the complexity of the non-linear and dynamic relationship between the dominant ideologies in society and the discourses of cultural products, the production processes of the commercial culture persist to establish successful paths to reach massive audience groups. Kellner explains the commercial form of culture that is produced for profit in the wider context of capitalism [25]. The executives of culture industries for Kellner, seeks to achieve sale success in massive scales thus target to attract a mass audience. The solution for this purpose might seem like the production of cultural products that would not offend the mass audience while attracting many at first glance. However the consumer success in culture industries is a much more complicated process that takes a deeper comprehension on the dynamics of society. For Kellner the cultural artifacts that exhibit a wide reach and recognition in societies and hence consumed by massive audience are the ones to keep up with the pulse of the society by resonating social experience. Such products practice social criticism in their narratives and bear the possibility of embodying discourses of social movements while articulating current ideas into attractive forms. Thus even though the cultural products that are produced to be consumed in a massive scale exhibit the media giants' commercial interests, they also reflect the competing ideologies in society and articulate conflicting positions. The commercial products of culture acquire a potential to advance forces of resistance and progress [25].

The space of culture as both the source and outcome of all intellectual and creative activity forms the ways of engagement with the discourses of social, economic and political conditions in society. The culture as a contested terrain harbours dominant and resistive tendencies, ideological inclinations of the past and present, carving out the future. Popular culture in its dynamic nature could be perceived as the culture of contemporary, the pulse of the society. It is consist of the prominent ideas and ideological tendencies that are in struggle in society. It forms the contemporary impulses of engaging with the cultural environment and influences the cultural practices in a given time and space.

Products of popular culture are the ones to come forward in a wide circulation and reach a large recognition in society. The popularity of a cultural product depends on its accordance with the dynamics of the culture, in other words its ability to catch the pulse of society.

The mainstream films that relates to the wider scope of products of popular culture gains distinction with their effort to catch the pulse of the society through to aim of reaching a large group of audience. The contemporary culture as a field of constant struggle involving discursive constitutions of various ideologies emerges in the narratives of mainstream films.

Once the mainstream film narrates a historical event, the representation of the past adopts the characteristics of the contemporary culture in its historiographical practice. Hence the filmic representation of history in mainstream films reflects the contemporary perspectives in its expression.

TURKISH NATIONALISM AND THE EARLY REPUBLICAN PERIOD IN YEŞILÇAM CINEMA

The narrative of the historical films to represent the Independence War and the Foundation of the Turkish Republic is characterized through the nationalist discourse in broad sense. The dramatic structure of the films are typically built on the courageous Turks' fight against the treacherous enemy. The enemy in the Independence War narratives would be both from inside and out. The inside enemy is the betrayers to collaborate with the occupational forces and the outside enemies are the occupational forces of imperialist states itself. The victorious Turks fight a rightful war for their country and

vanquish the enemy. Hence the films conceptualize the national identity that binds the land to the Turkish descent as a merit earned by the sacrifice of flesh and blood.

The frequency of the production of war films in Yeşilçam rises in accord with periods of political change [2]. The first peak in the production numbers of Independence War films takes place in 1951-52's in Turkey. This period is marked by Democratic Party's administration, Turkey's involvement in Korean War and the discussions on the Cyprus' affiliation to Greece. The sudden increase between the years 1959 to 1960 would ground on the political clashes between the students' resistance to the authoritarianism to develop in Democratic Party's administration. This period culminates with the military coup in 1960. After the second half of the 70's, the historical films to represent the fantastic heroes and battles takes place during the 14th, 15th Century Ottoman period like the serials of Kara Murat and Battal Gazi films emerge. The 70's in Turkey also vibrate with political turmoil to rise towards the 80's coup d'état besides the military operation of Cyprus. The historical adventure films of the period to integrate in the vain of popular nationalism outnumber the Indepence War films during the 70's in great extend. [2].

The representation of the heroic battles, the narrative of the courageousness that roots in the Turkish descent, the legitimization of the fight that is reduced to the struggle between good and bad is the recurring narrative in the tradition of historical films in Yeşilçam cinema. From this perspective the historical films to represent the Indepence War and the Foundation of the Turkish Republic positions within the conventions of Yeşilçam Historical films in general.

The discursive constitutions to express nationalistic features are rooted in the representation of historical Yeşilçam films regardless of the period of past that is narrated [26]. The portraiture of the enemy revolves around a constant depiction of evil whether it's a Viking, a Chinese or a perfidious Byzantine. The motive of the enemy in this genre conceptualization emerges from their shared hostility against the Turks. The hatred of the enemy against the Turks may or may not be explained in the narrative however, they are unexceptionally depicted as pitch-dark, furious barbarians [26].

The historical films of Yeşilçam were formed broadly as a reflection of the Turkish Republic's nationalistic demands and ambitions [26]. The historical representations of these films are rather disconnected from the factuality of the possible interpretations of the historical data.

Nevertheless, the historiographical performance of the films persists to operate through the experience of the diegesis and hence offer a good amount of patriotic pleasure. In Arslan's designation, the gratification served by the heroic narratives of victorious Ottoman-Turkish identity to bring the West World to its knees in Yeşilçam historical films far extends the Republican ideals of being equal to them [3]. The Western world is characterized through Christianity besides their hatred for the Turks and is solidified on the Byzantine Empire. The overwhelming defeat of the Byzantium by the sword of mighty Turks is legitimized on their perfidiousness.

The expressions of honor, patriotism, dignity and heroism create the pattern for the Ottoman-Turk identity against their fight with the tyrant West. The similar patterns operate in the narratives of the Indepence War films. This time the cruel enemy transforms from the perfidious Byzantium to the Imperialist Western states to occupy Anatolia.

The dramatic arc of Yeşilçam's Independence War films is generally structured through the events of the occupation of İstanbul by the imperialist states and the constitution of armed forces of resistance in Anatolia to kick the enemy out of the country. On the cinematic representation of the Indepence War, Şener points out to the repetitive characteristic of the films' narratives [27]. In his interpretation, the films frequently portray the struggle of the Anatolian resistance, to be concluded with the expelling of the enemy to the sea in İzmir. While assembling of a shallow love story to the narrative maintains the fluidity of the flow, the cast is typically formalized through eligible solutions.

The stories of Yeşilçam's Independence War Films are revolved around the journey of the Kemalists from the occupied İstanbul to Anatolia. The national Indepence struggle is led by the autonomous structure of armed forces founded by Ottoman ex-military with the support of anti-imperialist gangs of Anatolia and the Muslim community of villagers [27]. The non-Muslim population both in İstanbul and in Anatolia is frequently depicted as the supporters of the Imperialist countries. The protagonists of Yeşilçam are placed to play the Anatolians while the antagonists utilized in the roles for the imperialist characters or their collaborators from inside. To solve the congestions in the plot, the monologues to trigger the nationalistic impulses are attached frequently as well as the occasional portraiture of the national flag [27].

IV. CONCLUSION

The depiction of the Indepence War in the historical films of Yeşilçam reflects the Turks' victorious fight against the whole world. The significant theme of the "Invincible Turks" recurs in the films in accordance with the nationalistic discourse of the Republican state. The films frequently accommodate the expressions that emphasize the union of the nation as one hearth to defend their land against the thread for the imperialist exploitation. The whole nation struggles in the war regardless of gender, age or occupation. In this depiction, the context of the nation is described through the Turkish Muslim qualifications. The ethnic minorities with an emphasis on the non-Muslim groups in society are excluded from the Turkish identity.

The nationalist practices of the Early Republican Period are devoted to maintain a homogeneous unity in ethnic and cultural terms in the borders of Turkish Republic. The implementations to designate the qualifications and the limitations of the identity of Turkish Citizen culminate with the disregard and oppression of the ethnic varieties inherent to the land. The foundational politics of nationalism that designate the Turkish citizen through the Muslim Turkish characteristics and exclude the religious and ethnic minorities in society sustained until the emergence of critical

perspectives in Turkey during the 1990s.

The films to represent the Independence War in Yeşilçam Cinema reflect the perspective of the Turkish agents, generals or soldiers to fight on the side of Mustafa Kemal. The whole phases of the Indepence War and the foundation of the Republic are glorified yet already justified through the rightful fight of triumphant Turkish nation for its freedom. The films typically avoid the perspectives to criticize the organization of the resistance against the imperialist states.

The representation of the Early Republican Period in Yeşilçam Cinema would be interpreted in the context of the impact of contemporary social dynamics to shape the historiographical practice of products of popular culture. The malevolent representation of ethnic and religious minorities in the films about the Indepence War and foundation of the Republic could be acknowledged as an intrinsic extension of the courses of nationalism in Turkey.

The dominance of nationalist discourses on the historical films to narrate the Indepence War and the Foundation Process broadly reflects the discourse of the official historiography of Turkish Republic. The antagonistic representation of the non-Muslim groups and ethnic diversities in Ottoman society in the historical Yeşilçam films that represent the Independence War could be acknowledged through the impact of nationalism in Turkish politics. The prominence of the nationalistic discourses to structure the filmic historiography of the Early Republican Period in Yeşilçam Cinema exhibits the impact of the official state ideology on the culture and society in Turkey until the 90's.

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Twitter in the Context of Counter Publicity: Representation of Syrian Refugees in Turkey

Merve Zeynep Sarıbek

Abstract—The public sphere is an area where people from different identity groups can find the chance of representation. In fact, the concept of public sphere, which is a field of representation and free discussion, is now widely accepted as a state-owned field. A state-based public sphere brings along the problem of representation.

The concept of bourgeois public space, which is emphasized by Habermas outside the public sphere of state influence and control, has also been drawn with certain limits.

Although the bourgeois public sphere is, in principle, open to all classes of society, in practice this openness is limited only to a part of the population. The public space stressed by Habermas is a field of communicative action but at the same time it has become an area where only the capitalist and educated bourgeoisie can be involved. This led to the emergence of a representation problem in the bourgeois public sphere. At this point, new areas of representation will be sought as alternatives to the dominant public sphere. Negt and Kluge's proletarian / counter public sphere in response to these exclusions in the official public sphere, and Fraser's (2004) concept of subaltern counterpublics become central concepts in terms of the representation of different and marginalized groups of society.

Through new communication technologies, people from different identity groups can develop effective communication methods, and alternative public spaces can become areas where collective intelligence emerges. Today, the dominant public sphere is subject to change and transformation. In our study, especially the emergence of new information technologies, the intersection of structural transformations in the public sphere will be studied. With the fragmentation and dissolution of the public, social representation has shifted from one to another. New information technologies, especially digital technologies, have become the most important channels in the society that allow for the creation of different types of publics. The public sphere cannot be identified with a physical space or institution. The public sphere is not a geographic or institutional structure, but a discursive and action-related unity. For this reason, the real or virtual space, center or institutions, where different segments of the society find the opportunity to represent themselves and have the opportunity to act, can be included in the public sphere. After the development of information technologies, the discovery of the Internet and the development of Web 2.0 technology in particular have led to the creation of a new community in terms of promoting participation culture and social representation. The claim that the more liberal and fragmented structure created by these new technological developments has produced new alternative counterpublics that Negt and Kluge talked about has been strengthened.

In this study, the internet and the counter publicity function of Twitter as a social network will be examined. Representations forms of Syrians who emigrated to Turkey in Twitter will be discussed. The tweets selected from the accounts to be reviewed will be analyzed with content analysis method.

Keywords—Counter publicity, new media, public sphere, Twitter.

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Talking Us into the Suspension of Ethics to Justify War: How the Demise of the Public Intellectual in the Narrative on ISIS Fuels Populist Rhetoric

Quraysha Ismail Sooliman

Abstract—The story of IS and the violence it portrays is a story told by the media. It is the spectacle of the theatre, where wars are staged and from whence different acts emerge, where the battle is oversimplified, information is manipulated as media personnel are embedded, and only part of what is happening is disclosed. In almost all instances of reportage, 'experts' handpicked by the particular media outlet comment on Islam, Muslims and ISIS as if they all mean the same – as if they *are the same*. These individuals are portrayed as intellectuals - experts, yet in most instances serve as mouthpieces, disposable sycophants for think-tanks and regimes that feed gluttonously on resource rich nations. The mainstream media and its progeny have advanced myopic viewpoints which have intensified the narrative of 'terror' as being perpetrated only by Muslims. Research on strategic media intelligence revealed that more than eighty percent of the media coverage on certain US channels were negative and presented Muslims as militants, whilst none of the programmes that discussed these issues included a Muslim as a featured expert on the subject matter. Thus the visible absence of Muslim experts and analysts on mainstream news media who are invited to discuss debate and contribute to an understanding of issues that affect and impact on Muslim lives suggests an intentional slant in the presentation which allows for the permeation of very specific narratives. There is another more sinister hand at play. In seeking to report on the full reality of the events at hand Pulitzer Prize-winning journalists have been blocked from reporting anything that did not substantiate western propaganda and claims about Muslim barbarity and terrorism whilst countless other reporters revealed the extent to which their stories were either censored, edited or rejected by US editors who did not want to project the reality that Muslims "were actual human beings who might suffer as a consequence of the military strikes." Thus, the depoliticisation of Muslim opposition to empire, coloniality and foreign control of their resources and a culturalist naturalising of conflict between Islam and the West, referred to as the suspension of ethics facilitates for a dehumanising legitimisation of violence against Muslims. In this fashion, the cultures of racialised groups and exploited populations become politically insurgent. The focus here is on the meta-context, where the violence of ISIS is contextualised in this single moment amidst the noise of the mainstream media and the propaganda arms of both ISIS and the different states. In this regard, I ask, "Can there be absolute certainty about a war – a theatrical exchange that is largely mediated through the media?" In this instance, citizens of the world have to become alert, and ask, "Who leads us? And why are the drum beats for war- again?" Although there may be many stories, there usually is only one narrative in the main stream media.

Keywords—Islamic State (ISIS), propaganda politics, ethics, naturalisation of war, media distortions.

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Seating Comfortably in an RE Classroom

Alisha Esmail

Abstract—There is a great deal of emphasis on collaborative learning among students in today's classrooms (Johnson and Johnson, 1985; O'Donnell and King, 2014; Slavin *et al*., 2003; Webb and Palincsar, 1996). However, existing research on the environment in which collaborative learning takes place is scant. Therefore, this study aimed to explore the impact of seating arrangements on collaborative learning in a Grade 8 Religious Education classroom in Dar-es-Salaam, Tanzania. The research adopted a qualitative, action research methodological paradigm using a critical friend, student diaries, teacher-journal, and student-led conferences as the data collection tools in which both, students and teacher's perspectives were carefully embedded. The results of this study indicate that seating arrangements are fundamental tools in creating a conducive environment for effective collaboration to take place. In fact, depending on the objectives of the lesson, the teacher may adopt a layout that fits the collaborative plan. In this case, collaboration can occur in pairs, groups and as a whole class. This study recommends a combinational collaborative approach in which the teacher uses multiple collaborative plans to foster sustained participation and engagement in the classroom. Moreover, this study emphasises the teacher's role in this endeavour as a facilitator who role-models the desired communicational skills and behaviour and scaffolds the assigned task appropriately. Lastly, this study stresses on the importance of students' voice in ensuring successful teaching and learning.

Keywords—Seating arrangements, collaborative learning, classroom environment, student voices.

ABBREVIATIONS

BERA – British Educational Research Association
ITREB – Ismaili Tariqah and Religious Education Board
FLE – Facilitate, Listen, Engage
LL – Leading Learning
PBE – Practice Based Enquiry
PDP – Professional Development Portfolio
RE – Religious Education
REC – Religious Education Classroom
RPP – Research and Professional Practice
STEP – Secondary Teacher Education Programme
SPRing - Social Pedagogic Research into Group work
UT – Understanding Teaching
ZPD – Zone of Proximal Development

I. INTRODUCTION

RESEARCH on collaborative learning goes back almost four decades, reviewing and validating the positive outcomes of collaboration on students' learning (Johnson and Johnson, 1985; O'Donnell and King, 2014; Slavin *et al*., 2003; Webb and Palincsar, 1996). Particularly in the 21st century classrooms, student-centered pedagogies are geared towards promoting collaborative learning and knowledge creation (Harvey and Kenyon, 2013). However, the physical space in which collaborative learning takes place has not been explored extensively in the research databases. There seems to be a mismatch between the necessity of collaborative learning and the learning spaces provided for it (Riddle and Souter, 2012). In this light, this dissertation reports the impact of seating arrangements on collaborative learning, and this chapter will set the scene by exploring the context, rationale, and aims of this research study.

A. Context

I am a teacher trainee in my last year of an MTeach programme in London. As part of my degree, I have undertaken a small-scale action research to understand how collaborative learning can be enhanced by altering seating arrangements in a Religious Education Classroom (REC). This research was conducted under the Ismaili Tariqah and Religious Education Board (ITREB) in Dar-es-Salaam, Tanzania.

The ITREB institution in Tanzania mandates the delivery of effective religious education (under the leadership and guidance of His Highness Prince Karim Aga Khan IV) to Ismaili, Muslims in the country. Fig. 1 below depicts the centres in which STEP classes are established. This includes: Dar-es-Salaam, Mwanza, Zanzibar, Arusha, Mbeya, and Dodoma. In total, there are about one hundred and twenty Ismaili Secondary students in Tanzania and Dar-es-Salaam is the main centre with about eighty students.

Fig. 1 Map of Tanzania depicting the cities in which STEP classes are established (Google Maps, 2018)

During the 10-weeks research period, I worked with students aged 13 – 14 years (8th Graders) and a professional STEP

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(Secondary Teacher Education Programme) teacher to determine how seating arrangements may promote collaborative learning in the class. Classes were held every Saturday morning from 9:30 AM to 12:30 PM, in a local, mainstream Primary school. Fortunately, I had taught most of these students as their Grade 6, mainstream school teacher, about two years ago, and consequently, I could work closely and effectively with them to accomplish my research endeavours.

B. Rationale

I was inspired to examine seating arrangements in light of promoting collaboration within my classroom for two main reasons. Firstly, as a teacher-trainee, I observed and taught classes within a mainstream school in London, and I was particularly troubled with the fixed row and column seating arrangement that prevailed in most classrooms (as shown in Fig. 2). This was primarily because I valued collaborative learning from my own experiences a teacher trainee and therefore, I could not comprehend how students could collaborate efficiently in a traditional, teacher-centered classroom setting.
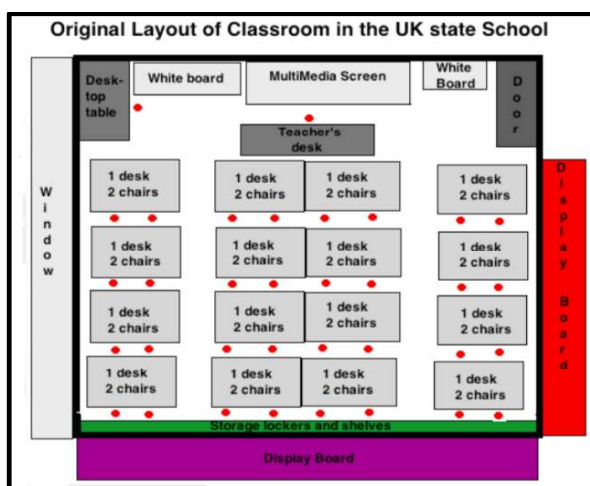

Fig. 2 Rows and columns seating arrangement in a UK mainstream school (Esmail, 2017, p. 5)

As part of the MTeach degree, in my Understanding Teaching (UT) module, I had an exciting opportunity to analyse the spatial layouts of the classroom with the aim of facilitating collaborative learning in a UK mainstream school. Hence, I attempted three different seating layouts (see Appendix A) and the jigsaw strategy to foster collaboration among students. My results concluded that "there is not one single layout that works best for all collaborative learning and it is through trial and error that the teacher may come to know the combination of a classroom layout and collaborative strategy that works well" (Esmail, 2017, p. 18).

A significant eye-opener from this experience was that the rows and columns arrangement does not necessarily equate to a teacher-centered classroom with zero collaboration among students. In fact, this arrangement may be able to foster pair collaboration and one-one student interactions considerably.

Nonetheless, I was curious to know how seating arrangements would impact collaborative learning among students in Dar-es-Salaam. Would a change in the physical layout of the classroom promote or hinder collaboration? How would students perceive the impact of different seating arrangements on their learning, and what would my role look like in this process? Consequently, this dissertation aims to unearth what I have learned about varying seating arrangements, and its impact on collaborative learning, as well as how I can use this knowledge to further enhance my teaching practices.

Furthermore, a plethora of research has been carried out on seating arrangements in light of student participation (Lotfy, 2012; Michelini *et al.*, 1976; Sommer, 1967), behaviour management (Anderson, 2009; Kaya & Burgess, 2007; Wannarka and Ruhl, 2008), student performance and achievement (Meeks *et al.*, 2013; Shipman, 2008). However, the relationship between seating arrangements and collaborative learning is scarce in published databases. Similarly, there is an abundance of research on enhancing collaboration within the classrooms by previous STEP teachers (Ali, 2013; Aydimamadov, 2009; Fidai, 2009) however, there are none that examine seating arrangement as a tool to promote collaboration.

This does not mean that teachers in the field are oblivious to this relationship because several bloggers and online websites have encouraged different seating arrangements without reviewed research. According to Wong & Wong (2015), several educators succumb to teaching according to the newest trend or philosophy, never enquiring for the research confirmation of its success. However, if students are going to be learning in classrooms with altered seating arrangements, we need to be certain that it is truly in their best interest. Therefore, this research will look at conventional as well as innovative seating arrangements to foster collaboration among students in a RE class in Dar-es-Salaam, Tanzania.

C. Aims of Research Study

1. *Varying seating arrangements:* In this research study, I focused on six different seating arrangements that were thoughtfully planned and aimed at promoting collaboration amongst students. These arrangements were complimentary to the collaborative learning tasks and gradually shifted focus from enabling pair work amongst students, to assisting whole class collaboration and facilitating cluster group settings.
2. *Students' perspectives:* I incorporated how students felt about each seating arrangement and their interaction with peers. I was hoping for a joint effort between me and the students to refine and develop their collaborative learning skills with an emphasis on friendliness, respectful, and team work while working in the different seating arrangements.
3. *Teacher's role:* I reflected on my role in the various seating arrangements and the collaborative learning tasks implemented in the classroom. In particular, I intended to assume the facilitator role in terms of scaffolding and role-modelling.

In summary, this chapter has situated the context, rationale, and aims of this research study. The next chapter will explore existing literature on this topic with the aim of gaining a better understanding of research studies that have taken place by educators and researchers in different contexts.

II. LITERATURE REVIEW

"We spend a lot of time trying to change people. The thing to do is to change the environment and the people will change themselves" (Watson, 2006, p.24).

All learning transpires in an environment. The physical characteristics of a learning space has an impact on students' learning (Sawers *et al.,* 2016). The quote above illustrates the power of environment in its ability to transform people. However, less attention is paid to the spatial environment in which learning takes place (Lotfy, 2012), and even lesser research is conducted on how seating arrangements can be used as a tool to promote collaborative learning in the classrooms. Unlike the traditional pedagogies in which knowledge is passively transferred from a teacher to the student, the modern constructivist teaching philosophy suggests that learners are active constructors of knowledge (Nyikos and Hashimoto, 1997; Wadsworth, 1996). In fact, at the heart of a student-centred outlook lies collaborative learning in which students interact with each other to restructure their own knowledge (O'Donnell, 2006). While the shift from traditional to modern pedagogies is remarkable, the physical space in which learning occurs is stagnant.

This chapter will examine the most prominent seating arrangements found in today's classrooms followed by the formation of a strong link between seating arrangements and collaborative learning in light of what a 21st century classroom should look like. Student perspectives will be embedded throughout to better understand the users' assessments of the various layouts. Lastly, this chapter will conclude by highlighting what the role of the teacher might be in promoting collaborative learning.

A. Types of Seating Arrangements

According to Taylor and Enggass (2009, p. 25), the classroom environment acts as a "silent curriculum" and within the corpus of environment, seating arrangements are a prominent feature in which students spend most of their time. This reciprocates in consciously planning for an arrangement of desks and chairs that are favourable for the learning outcomes of the class. Cornell (2002) suggests two important aspects of the physical layout of the classroom; usability and functionality. The former informs how movable furniture works in a classroom such that users feel empowered to use it, and the later infers that classroom furniture is aligned with the classroom objectives, thus facilitating an efficient teaching and learning process.

There are several seating plans implemented by teachers and some of these layouts are backed up by extensive research to justify their use whereas, others are yet to be studied. The most common arrangements in today's classroom are: rows and columns, modular, and the horseshoe seating arrangements.

The following section will examine each seating arrangement in light of the interaction patterns as epitomised in the current literature corpus.

- Rows and Columns Seating Arrangement:

This seating arrangement consists of desks and chairs arranged in rows and columns facing towards the front of the classroom (as shown in Fig. 3 below). Depending on the size of the desk, students may either seat individually or in pods.
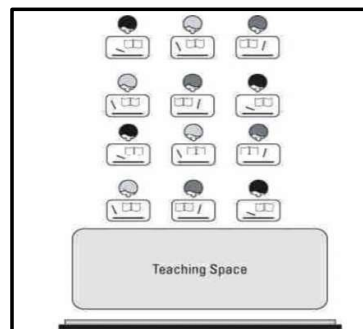
Fig. 3 Row and Column seating arrangement with students facing towards the front of the classroom, often where the teacher is standing (Kelly, 2003, p. 14)

Historically, this layout was best suited to allow for sufficient lighting from the side windows (Sommer, 1967). Nonetheless, today, with developments in lighting, this traditional layout persists in many contexts. In fact, it is synonymously associated with a teacher-centered classroom because it allows minimum student-student interactions and places the primary interaction focus on the teacher who is usually positioned at the front of the classroom (Pearlman, 2010). It is widely believed that the rows and columns matrix is suitable for lectured based teaching styles or assigning individual tasks (Richmond and McCroskey, 2000).

Over time, this layout has received a negative connotation. Alas, Rosenfeld and Civikly (1976, p. 161) have compared it to "tombstones in a military cemetery" in order to describe the passive nature of this arrangement. However, I am sceptical about equating this arrangement to a teacher-centered or passive classroom because depending on the tasks provided, the attention may or may not be on the teacher. According to Bonus and Riordan (1998), the effectiveness of any seating arrangement is determined by the activity assigned to the students. For example, if the strategy of think, pair, and share is assigned to pods, all students would be required to participate, thus removing the teacher from the focal point. In fact, research shows that the principles of a learner-centered approach can be embedded within traditional classroom learning environment (Sztejnberg and Finch, 2006). Therefore, it is imperative to circumvent generalizations of seating arrangements with teaching philosophies.

On the bright side, this arrangement promotes teacher-student interaction (Richmond and McCroskey, 2000). According to Farmer *et al.* (2011), the interactions between the teacher and students sets the context of the classroom environment which may contour the types of relationships that

students form with each other. These peer-relationships are crucial for determining the quality of collaboration amongst them, and therefore, teacher-student interactions cannot be undermined in the classroom. Conversely, Sztejnberg and Finch (2006) assert that the students seated at the front of the classroom tend to participate more than those at the back. However, this issue may be solved allocating seats in the classroom. Interestingly, McCroskey and McVetta (1978) found that students preferred this arrangement better than the horseshoe and cluster arrangements for compulsory courses. This may be due to the increased on-task behaviour (Lotfy, 2012) that allows students to concentrate on their work with minimum distractions from other students.

Lastly, the row and column matrix may be used to assist fruitful one-one, student-student interactions in the classroom. This is especially beneficial in a religious education classroom where there are few right or wrong answers. According to Swenson (2008), pair work in this intimate setting may allow students who otherwise do not speak to put forward their perspectives, thus, making them feel empowered and valuable in the classroom.

- Modular Seating Arrangement:

The modular seating arrangement consists of tables and chairs arranged in a format where students face each other in small cluster groups (as shown in Fig. 4 below).
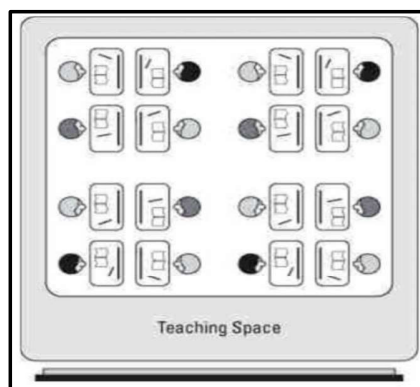

Fig. 4 The modular seating arrangement where students seat facing each other (Kelly, 2003, p.16)

This layout removes the teacher from the focal point and ensures maximised possibilities of both, student-student interactions and teacher-student interactions in the classroom (McCorskey and McVetta, 1978). Moreover, it permits eye-to-eye contact amongst students which is essential to the effective collaboration process (Kinahan, 2017; O'Hare, 1998). According to Espey (2008), when students learn together in small groups, greater academic achievement is obtained. Students in this setting have the opportunity to share and exchange ideas, thus maximising their learning opportunities.

In a modular arrangement, students can help each other in the learning process whereby the more able students may help the weaker students in understanding the content of the curriculum. This idea was proposed by Vygotsky (1978) as the Zone of Proximal Development (ZPD), which authenticates distance

between the actual development of the students and potential development of the students via collaboration with more able peers. Nevertheless, many researchers have noted that learning also occurs in collaboration between students who have similar levels of conceptual understanding (Cowie et al., 2000; Fernandes et al., 2011). In both cases, this seating arrangement is conducive to a collaborative learning environment.

Furthermore, the cluster layout has been favoured in light of current studies that highlight the importance of the student-centered approach to learning (Entwistle and Ramsden, 2015). However, teachers' experiences suggest that student-student interactions in the modular setting may undermine rather than enhance learning (Baines et al., 2009). This is perhaps due to the increased disruptions and off-task conversations among students seated in this arrangement. Additionally, from the students' perspectives, they may feel reluctant to contribute in group tasks for fear of losing credibility in sight of their peers (Baines et al., 2009). In this case, the modular seating arrangement may cause a stressful experience for students which may result in enduring conflicts among peers.

Van den Berg and Cillessen (2015) contradict the rebuffs of allowing students to work together and advocate for the intergroup contact theory which suggests that physical proximity between students can lead to liking and thus, friendships among students. This indicates that the teacher is in control of the social dynamics in the classroom. However, McCorskey and McVetta (1978) asserts that the teacher's ability to manipulate communication in a classroom is limited then was previously believed. This makes sense because placing students next to each other does not automatically mean they will like each other and get along merrily. However, with time and persistent efforts in building a strong relationship can make the intergroup contact theory materialize. Additionally, studies by Gest and Rodkin (2011) have indicated that the correct grouping strategies can create positive and long-lasting friendships among students and this in return, creates a positive classroom environment which is essential for successful learning.

- Horseshoe Seating Arrangement:

The horseshoe seating arrangement consists of tables and chairs arranged in a U-shape with an empty space in the centre (as shown in Fig. 5 below).
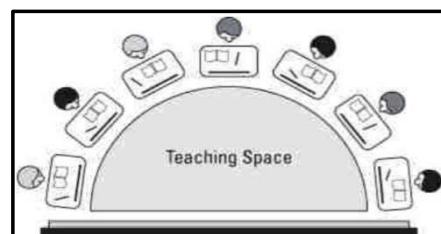

Fig. 5 A horseshoe seating arrangement with teaching space in the centre (Kelly, 2003, p. 18)

This model is prescribed for a two-way flow of student-student interactions and teacher-student interactions. However, O'Hare (1998) cautions against teachers who stand and tower

over the students, and teachers who sit and are invisible to students in back rows. Nonetheless, the teacher has easy access to all students and hence, may choose to move in and out of the centre space to facilitate group discussions and or support individual students.

From the students' perspectives, being seated in the horseshoe arrangement fosters accountability. They tend to remain alert and pay attention. In Parson's (2016, p. 18) study, one student reported that the horseshoe arrangement "helps you to stay awake, because when you fall asleep, it's really embarrassing" Additionally, students commented on the importance of being able to see each other especially during discussions. Wannarka and Ruhl (2008) found that communication increased when students sat facing one another. Similarly, a student from Parson's (2016, p. 18) study stated that "if you're going to debate, you want to be able to look at who's debating you." Equally, Shipman's (2008) research on the effects of seating position on student performance concluded that when the teacher makes eye-contact with students in a horseshoe setting, they tend to participate more.

According to Ramli and Masri (2013), the horseshoe layout enhances interactions, question-asking, behaviour, and overall communication in the classroom. Moreover, it is conducive for classroom discussions (Lotfy, 2012), it enables quicker problem solving and promotes critical thinking amongst students (Espey, 2008). Lastly, this arrangement creates an increased sense of community and enhances the social interactions among students (Kaya and Burgess, 2007).

B. Understanding Collaborative Learning

The previous section explored how different seating arrangements enabled interactions among students in the classroom. Consequently, this section will build on the interaction fragment by examining collaborative learning in the classroom. In this light, the importance of collaborative learning as well as the issues with the implementation of collaborative learning will be critically analysed below.

Collaborative learning is defined as "a method that implies working in a group of two or more to achieve a common goal, while respecting each individuals' contributions to the whole (McInnerney and Robert, 2004, p. 200). This means there is mutual engagement amongst students to solve the assigned problem. However, collaborative learning is different from cooperative learning in which students divide the assigned task and are responsible for a portion of the problem to be solved (Roschelle and Teasley, 1995).

According to O'Donnell (2006), by collaborating with each other, students may engage in cognitive restructuring as they elaborate on their thinking processes and reorganise and clarify material to develop new perceptions and understandings. Nonetheless, simply placing students in a group does not ensure collaborative learning. Webb (2009, p. 2) suggests the extent to which students may benefit in a collaborative learning setting depends on the "nature of students' participation in group work." This refers to the quality and depth of students' contribution in the group works. Webb and Palincsar (1996) measure successful collaborative learning as the extent to which

students may give or help, share prior-knowledge, reason with each other's' ideas and validate their own, and the extent to which they comprehend and resolve conflicts between them. Therefore, a high degree of coordination is required among group members.

Several reports have demonstrated a range of pitfalls in letting students to work together. Firstly, Baines *et al.* (2009) reported that students may lack communication skills to effectively engage in group interactions. Moreover, teachers have narrated the loss of control, increased disruptions, off-task conversations, and lower productivity as a result of group work (Cohen, 1994). Furthermore, collaboration among peers may cause negative social emotions due to potential punitive judgements, embarrassment, lower-self-esteem, and confidence (Webb, 2009). Consequently, Baines *et al.* (2009, p. 97) have introduced the SPRinG (Social Pedagogic Research into Group work) program with four key principles to foster effective collaboration among students: (1) a strong emphasis on "respect, trust, sensitivity, and inclusion" among peers, (2) classroom arrangements including "layouts, group size, composition, and stability", (3) lesson and classroom activities that foster group work among peers, and (4) teacher involvement in "mentoring and scaffolding autonomous group functioning." A combination of these four principles may promote interpersonal orientation that may address the challenges that inhibit the success of group works.

Oblinger (2006) has called for a reconceptualization of the classroom environment especially in light of enabling students to be able to interact and work with each other. Consequently, the next section builds on this idea by bridging the gap between seating arrangements and collaborative learning.

C. Linking Seating Arrangements and Collaborative Learning

Vygotsky (1978) introduced the idea of social interactions to promote learning among students. Similarly, Dewey (1998) emphasized on the use of physical environment as an intermediary to facilitate learning in the classroom. Accordingly, McCroskey and McVetta (1978) and O'Hare (1998) assert that the kind and amount of collaboration in a classroom are the results of the respective seating arrangements. However, there is limited research on how to use suitable seating arrangements to promote collaborative learning (Cornell, 2002). Therefore, more attention must be given to the physical layout of the classrooms especially in light of current demand for group work and collaboration in the classrooms.

Swenson (2008) claims that effective learning occurs when the classroom design fosters student engagement. Additionally, Kaya and Burgess (2007) believe that spatial arrangements in the classroom can positively affect students' on-task behaviour and social interactions. This means that each seating arrangement has a different effect on the communication in the classroom (McCroskey and McVetta, 1978). Moreover, all seating arrangements may have a positive component subject to the desired type of collaboration in the classroom. A concept that ties seating arrangements to collaborative practices is the fan and web patterns of interaction (as shown in Fig. 6 below).
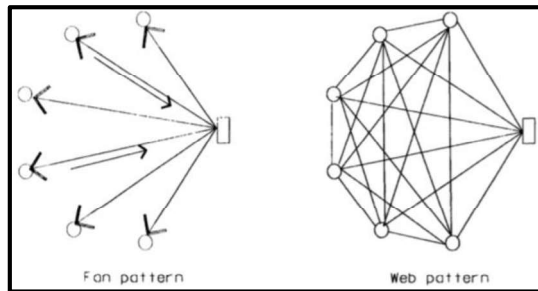
Fig. 6 The fan and web pattern of interactions (O'Hare, 1998, p. 708)

Fig. 6 above uses arrows to demonstrate a conversation between a speaker and a listener. In this case, class discussion is like a web of interactions involving several students whereas a fan pattern of interaction involves one party; usually the instructor (O'Hare, 1998). In a learning environment, the web pattern is exhibited in small group conversations where students are seated in a circle format facing and conversing with each other. Accordingly, the fan pattern is characterised by a communication flow that is limited to the teacher and not among students. Given these characterizations, the fan pattern refers a row and column seating arrangement whereas the web pattern refers to a modular or horseshoe seating arrangement (O'Hare, 1998).

Accordingly, the fan pattern inhibits student-to-student interactions. However, this pattern of interaction does not consider the one-to-one intimate student interaction that can take place between students sitting adjacent to each other. Moreover, the web pattern in practical terms may seem too chaotic with students trying to speak louder than each other so as to have themselves heard. According to Bonus and Riordan (1998), students tend to be more distracted in a clustered setting as compared to the row and column setting. Therefore, depending on the students and the social dynamics of the classroom, perhaps either pattern of interaction may work better than the other.

In practice, Morrone *et al.* (2014, p. 41) replaced the traditional classroom with a coffeehouse classroom with "high and low bistro-style tables at the centre, booths, and sofa set seating clustered around coffee tables" (as shown in Fig. 7 below).

Fig. 7 A coffeehouse classroom (Morrone *et al.*, 2014, p. 43)

The main agenda for this research study was to provide an environment that facilitated collaborative learning and their

results indicated that students appreciated the comfortable seating and consented the environment as conducive to their learning. This approach utilised an informal seating arrangement to emphasize the importance of interactions among students in a student centered classroom and hence, it was readily approved by students.

Similarly, Gurzynski-Weiss *et al*. (2015) introduced a collaborative café in place of a traditional classroom, with comfortable rolling chairs and moveable worktables. Their study concluded that students were able to move and interact with multiple students in the classroom. According to Gass and Mackey (2006), when students interact with different interlocutors, their communication skills are strengthened, and learning outcomes are enhanced. Equally, Gurzynski-Weiss *et al*. (2015) reported that collaborative cafés enabled a substantially more student-centered collaboration with swift transitions from one activity to another.

In conclusion, Adedukon *et al.,* (2017) suggest that in order to promote collaboration, the seating arrangements should be flexible, future-proofed, creative, and supportive. Especially with regards to flexibility, Pearlman (2010) emphasizes on the importance of movable worktables and chairs so that they may be easily re-arranged to fit the objectives of the classroom. However, this may not always be feasible due to school policies, budgets, and availability. Therefore, creativity plays a big role. How a teacher uses the given space and resources accessible is crucial for promoting collaborative learning in the classroom. In this light, the next section highlights the role of the teacher in this endeavour.

D. The Role of a Teacher

Altimare and Sheridan, (2016, p. 2) claim that a "learning space is not a neutral container, but is instead an opportunity to encourage, enable, and embody best teaching practices." However, given the diversity of students and the various perspectives they have on classroom arrangements, it can be challenging for the teacher to accommodate every student's preferences. This section will therefore explore the teacher's role in promoting collaboration in the classroom.

According to Gremmen *et al*. (2016), the teacher may either assume an authoritative role or a facilitative role. In the former role, the teacher may directly influence the social networks within the classroom by assigning groups and seating locations. Whereas in the latter role, the teacher may gradually scaffold students' social opportunities through varying seating arrangements. In both cases, the teacher plays an active role in students' collaborative learning process. Nonetheless, teachers are not solely responsible for efficient collaborative learning. Pointon (2000) suggests that teachers can be decision makers as long as they reserve occasions when students can make choices. Additionally, Reynold (2010) explains that when students are given responsibility and control of their environment, they are more likely to develop shared goals with their teachers. As a result, the burden of ensuring successful collaborative learning is split between the teacher and the students.

In Gest and Rodkin's (2011) research study, group tasks were hindered due to the lack of collaboration among students and

therefore, their study concluded that a deeper understanding of the social dynamics within a classroom can make teachers more attuned and better able to adapt their practices accordingly. In this light, Farmer *et al.* (2011, p. 247) use the metaphor, "invisible hand of the teacher" to understand how teacher practices can affect the classroom social ecology as well as peer relationships. Interestingly, Rapoport (1990, p.178) reported that the seating arrangements decided by teachers convey meaning and, in this context, it refers to the "non-verbal communication from environment to people." Therefore, choosing the ideal seating arrangement is an important decision that should be based on many factors including class needs and interaction patterns that complement the teachers' teaching styles.

The teacher may have several justifications for choosing a particular seating arrangement however, McCorskey and McVetta (1978) caution against an arrangement that is disagreeable to the students. They explain that if students are unhappy or uncomfortable with an arrangement decided by the teacher, a barrier can easily be erected and possibly prevent learning. Equally, research demonstrates that teachers have reported uncertainties with regards to the benefits of allowing students to work together (Baines *et al.*, 2009). This may be due to the disruptions, lack of control, behavioural issues, and so forth. However, Sztejnberg and Finch (2006) stress that teachers must believe that students are active and not passive participants of the classroom and consequently they must be allowed to work together.

Irrespective of which seating arrangement is implemented, teachers must keep in mind the many conditions which ensure students' success in learning. Moreover, Sommer (1977) asserts that there is no ideal classroom layout for all activities. Therefore, seating arrangements cannot be viewed in a vacuum but rather as a tool that can facilitate learning especially when complemented by learning styles that fit the agenda of the classroom.

In conclusion, the potential relationship between seating arrangements and collaborative learning is clear from the interaction patterns found in the most common seating arrangements in today's classrooms. Additionally, the new and innovative seating arrangements such as the coffee house and collaborative café shed light into the importance of both elements (seating arrangements and collaborative learning) within a classroom. Consequently, this dissertation will aim to answer the following main and subsidiary questions:

- Main Research Question:

How can seating arrangements impact collaborative learning in an RE classroom in Dar-es-Salaam, Tanzania?

- Subsidiary Research Questions:
1. What are the benefits and challenges of the different seating arrangements in light of promoting collaboration among students?
2. How do students perceive the effect of the various seating arrangements on their collaboration with peers?
3. What is the role of the teacher in promoting collaboration via changing seating arrangements?

The next chapter explains the methodology and data collection tools used in this study.

III. AIMS AND METHODS

In this chapter, I will explore the interpretive-phenomenological research design to understand how altering seating arrangements can enhance collaboration amongst students. Additionally, I will examine the action research framework to comprehend how I can best improve my practice as a teacher-researcher and enhance my students' learning. This chapter will then continue to outline the sample size, data collection tools and the data analysis techniques that were best suited for this study. And lastly, this chapter will state the important ethical underpinnings that guided my research study.

A. Qualitative Research

There is an evident split between the qualitative or interpretive approach and the quantitative or positivist approach. The main difference lies in that the former is concerned with numbers, whereas the latter is concerned with abstract characteristics of events (Bernard, 2017). Moreover, the phenomenological aspect focuses on the participants' experiences and the meanings they attach to it rather than fixed numerical data (Wilson, 2014). This belief stems for the idea that reality is socially constructed by humans, and therefore, it demands a rich description of human experiences (Corbetta, 2003; Marcon and Gopal, 2005). In this study, the qualitative research design was employed for two main reasons: context and the natural setting of the research study.

Firstly, the interpretive-phenomenological approach concerns itself with context. According to Kincheloe (2012), human experiences are shaped in particular contexts and therefore, the meaning given to events by the participants cannot be understood if removed from those contexts. Moreover, the participants' perspectives are embedded in a particular context and stripping out the context from this study would result in a failure to fully comprehend the participants' experiences (Kincheloe, 2012). In this case, the research study took place in Dar-es-Salaam, Tanzania and students there are not the same as the students in for example, the UK. Additionally, the students in one class in Dar-es-Salaam may not be the same as another class within the same city. Therefore, one may not be able to apply the theories that may have worked in one context to another.

Secondly, a distinct characteristic of the qualitative research design is the natural setting in which the research takes place. The natural setting is recognised as a complex and interactive space where rich and descriptive data can be collected. According to Given (2008), research must take place in the normal, everyday setting of the participants. This means that the environment in which research is taking place should be non-manipulative and open to anything that emerges from the study. Unlike medical sciences where subjects are taken out of field and into the laboratory, qualitative researchers collect data and study things as they are in the field (Given, 2008). According to Merriam and Tisdell (2015, p. 15), qualitative researchers are interested in "how people make sense of their world and the

experiences they have in the world." Therefore, it is imperative to capture participants' experiences while they are lived in the classroom.

A potential limitation of the qualitative research is the lack of a balance between meaning and context. Silverman (2010) argues that the qualitative researchers sometimes focus more on meaning and experiences and tend to forget about contextual sensitivities. For example, the phenomenological approach emphasizes on understanding and interpreting participants' experiences, therefore, it is possible that less attention is paid to the context in which the research is taking place. Nonetheless, I strongly believe that the phenomenological is inclusive of the context because experiences and the meaning attached to these experiences do not take place in a vacuum.

Furthermore, the quality of data collected may be subjective to what the researcher attaches importance (Denscombe, 2017). However, a common aspect of qualitative research involves the idea of making judgements. This is essential to describe the events and to appraise the significance of these events in a larger picture of the educational concerns. The key to making good judgements then lies on a clear awareness of the context, aims, and consciousness of one's own bias (Kincheloe, 2012). In fact, teacher-researchers are known to use the qualitative research to answer questions such as, "Are you the teacher you think you are?" (Strauss, 1995, p. 30). This demonstrates the reflective nature of researchers embarking upon a qualitative research project.

Lastly, a drawback of the qualitative research design lies in its lack of reliability and validity (Denscombe, 2017). However, there are multiple ways in which I have ensured the "trustworthiness" of my findings. Firstly, I have accounted for my personal bias which may influence my findings (in chapter 6). Secondly, I have meticulously recorded my thought process during each stage of the research in my journal and therefore, a clear trail is visible, and demonstrates consistent and transparent data. Moreover, I had a critical friend who brought in valuable different perspectives throughout my research project. And lastly, I used multiple data collection methods to triangulate my data.

B. Action Research

There are many types of qualitative approaches however, I will focus on action research for this study. Action research is a hands-on, small scale research project which aims at solving a problem (Denscombe, 2017). According to Altrichter *et al.*, (2002), action research involves a solid interlink between reflection and action. It often begins with a problem, issue, or set of questions arising for the practitioner in the professional field. This then leads to a plan of action to combat the given concerns. According to Elliot (2003), the action part in an action research is an integral part in the teacher's construction of new knowledge and of understanding the problem holistically.

The action research cycle shown in Fig. 8 is a simple, spiral model grounded on Lewin's work (1946) and explicated by McTaggart and Kemmis (1988). It involves four phases: plan-act-observe-reflect. The cyclical process aims at improving

practice on an on- going process through continuous reflection. The authors of this diagram advise us against using this as a rigid structure (Koshy, 2009). In fact, the stages may overlap, and initial thoughts and plans may quickly become obsolete as learning continuous from previous experiences. According to Koshy (2009, p. 5) "In reality the process is likely to be more fluid, open, and responsive." This demonstrates that an action research is a constructive enquiry. The action researcher constructs new knowledge of specific issues through planning, acting, evaluating, reflecting, and learning from experiences (Koshy, 2009). Therefore, an action researcher often embarks on a continuous learning process.
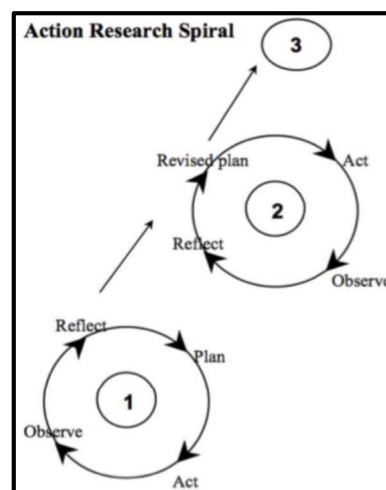
Fig. 8 Action research cycle (Zuber-Skerrit, 2001, p. 15)

A potential challenge of the action research approach is achieving a fine balance between the dual roles of a teacher and a researcher. In the field, it is easy to focus on one role and neglect the other. Additionally, action research tends to add extra burden on the practitioner. However, teacher-researchers are known to transform their classrooms into learning communities (Kemmis, 2009). They are in the most suitable positions to detect real problems in order to improve their practices as well as students' overall learning (Creswell, 2002). Therefore, if only researchers and not practitioners engaged in this pursuit, there would most likely be a gap between theory and practice (Hargreaves, 2007). Lastly, there is no end to action research. The cyclical nature of this approach allows teachers continually improve and develop in the educational field.

C. Sampling

Considering the small scale of this research project, I employed a purposive sampling method to get a spectrum of responses. This means I hand-picked the participants who I thought were best suited for this study (Glenn, 2010). Given my research topic, I had to decide on who would be most likely to provide the best information and therefore, I chose four participants: Naeem, Suhail, Inaara, and Elina (pseudonyms) who I believe showcased a spectrum of responses. Undoubtedly, there are ethical implications to this sampling which will be discussed below.

On the other hand, I used the convenience sampling or availability sampling for selecting my critical friend, Mr. Zayn. This was fitting because Mr. Zayn was the host teacher of this particular class and was available to be observe and provide critical feedback. A common problem with the small sample size is that it raises the issue of generalizability to the whole population of the research (Thompson, 2011). Therefore, this research is specific to my context and does not claim wider generalizations to other contexts.

D. Data Collection Tools

Triangulation is "a technique of comparing and justifying data from one evaluation method against that from another" (Kember, 2000, p. 54). It allows for multiple sources of data collection and ensures the convergence of evidences such that the data yielded, is cross-checked, and validated for accuracy and reliability purposes (Yin, 2013). According to Kember (2000), a conclusion reached from several methods is more convincing than that from a single method. In this research, I triangulated my data to enhance the credibility of my research.

As shown in Fig. 9, data was collected through a critical friend, document analysis and student led conferences. In this section, I will briefly elaborate on each of the data collection tools.
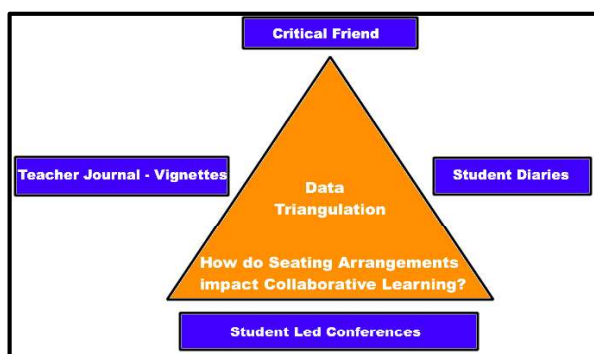
Fig. 9 Triangulation of the data collection tools

- Critical Friend:

My role in the action-research was significant; I was embedded in the research process and my personal bias could have easily influenced my research data. Therefore, I invited the host teacher to be my critical friend. A critical friend is someone who documents another teacher's teaching and provides feedback in order to improve practice (Wennergren, 2016). In this case, the host teacher was a professional STEP teacher and hence had a well-grounded understanding of issues within the educational context as well as the local context.

The critical friend had access to my research goals and therefore, was in a good position to view my practice from a bird eye's perspective (Kember, 2000). Student learning was at the centre of this process and involved a direct connection between improving my teaching practice as well as students' success (Timperley, 2011). Therefore, my critical friend was able to observe minute details of my practice that I may have not considered or deemed insignificant (Denscombe, 2017).

I strongly believe that my critical friend enhanced the credibility and trustworthiness of my findings (Wennergren, 2016). After each class, we discussed the challenges and opportunities of the lesson to better understand my teaching practices and my research endeavours (see Appendix D). During this process, our thoughts did not always coincide; however, I benefited a great deal from the alternate perspectives provided. According to Elliot (2003), there are some concerns regarding how much assistance a critical friend should provide however, this is an issue because the role is flexible and does not entail a clearly defined set of responsibilities. Wennergren (2016) comments on the dual responsibilities of promoting teacher development as well as facilitating the progress of research. Nonetheless, maintaining a balance can between these two roles can be a challenge for the critical friend just as it is for a teacher-researcher.

- Student Diaries:

According to Denscombe (2017), diaries must include factual data, significant incidents and personal interpretation. Participants' reflections to the different seating arrangements and its impact on collaborative learning provide rich data on their perspectives and thought processes (Costello, 2011). Moreover, the chronological arrangement of these reflections allowed me to see patterns of what worked, and what did not work for the participants. However, the large amounts of data collected were tedious to sort and analyse (Denscombe, 2017). Moreover, it was difficult to correctly interpret the participants' diaries. Therefore, I invited students to verbally explain their diaries in the Student Led Conferences.

Student diaries were handed out to the students at the end of each class during the research period (see Appendix C). These diaries directed students to reflect on the seating arrangements and its impact on their collaboration with other students. Initially, it was challenging for students to understand the link between collaboration and seating arrangement. However, to overcome this hurdle, I provided clear guiding questions to help them reflect in accordance to my research aims. As Hinds (2002, p. 52) suggests, "explicit instructions [must be provided] in order to ensure the diary is completed in a manner fitting the aims of the research." However, this does not mean I guided student responses in any way. If anything, I stirred them to think about seating arrangements and collaboration rather than other factors that may inhibit or promote learning.

A particular limitation of the student diaries was that were well aware that I would be reading their diaries and hence, they tried to please me with positive comments and withheld negative comments. In order to combat this challenge, I had several open discussions about how student perspective matters, whether it is positive or negative. Moreover, the sample of participants I chose included students who were brave enough to articulate how they felt about each seating arrangement. Lastly, I ensured sufficient time before the end of the class for students to contemplate on their thought processes and complete the diary successfully.

- Teacher-Researcher Journal - Vignettes:

According to Kember (2000, p. 42), "reflection is an integral part of the action research." It is a comprehensive account that

gives personalised meaning to the experiences by recording observations, key points, significant events, and feelings (Taylor *et al.*, 2006). In this research study, I wrote reflections in a systematic way so that I could refer to the chronology of events in the later stages of the study (Denscombe, 2017). This also enabled me to track any changes, as well as monitor my growth and progress as a teacher-researcher. However, it was fairly easy to write a lot, and this created difficulty when analysing of the data as I had to spend a lot of time picking and choosing the relevant data to my research topic (Koshy, 2009). On the other end, when the research did not go as planned, I saw myself disengaging from the reflective process of writing. Nonetheless, after a productive discussion with my critical fiend, I could visualize how to get my research back on track and this motivated me to continue writing my reflective practice. Overall, the research journal enabled me to capture all my learnings in the heat of the moment and hence, I could make sense of what I was doing in a systematic fashion.

In this research, data from the teacher journal is reported as a vignette. According to Poulou (2001, p. 52), "vignettes are short descriptions of hypothetical persons or situations which contain the information necessary for the respondent to base their judgements upon." They are "written, fictitious materials including background, referral or observation information (Poulou, 2001. p. 52). However, because they are hypothetical and fictitious, there are implications for its trustworthiness because it not entirely a true account. In this research, the vignettes are constructed from a primary source of data namely the teacher journal. As a teacher-researcher I had greater control over the variables incorporated and therefore, the internal validity of my study was increased.

In general, vignettes are illustrative, easy to read and thus, accessible to the readers (Barter and Renold, 1999). According to Spalding and Phillips (2007, p. 960), "vignettes are a useful way of making concrete the events and experience of practice, facilitating the identification of individuals' situated understanding and practical theory." In other words, they provide a means to explore participants' perceptions, beliefs and meanings about specific situations and therefore, are beneficial for the interpretive approach of this study.

- Student Led Conferences:

In order to triangulate my data, I built on the student diaries by organising Student Led Conferences. According to Johnson (2005), these conferences are directed by students, and role of the teacher is limited to prompting questions when necessary. Through this method, participants were given an opportunity to explain their diaries as well as incorporate their un-written feelings and thoughts on the altered seating arrangements in the classroom. In this research, I hosted four Student Led Conferences with Suhail, Naeem, Elina, and Inaara to get a solid understanding of their thoughts on how seating arrangements can impact collaboration.

A potential disadvantage of Student Led Conferences is that it involves putting participants on the spot, and therefore, there is a risk of distressing participants and or causing discomfort (Johnson, 2005). Nonetheless, in order to combat this potential challenge, participants in this study were provided with ample time to prepare and rehearse their diaries. They were then individually invited to a face to face conversation with me whereby they explained their preferred seating arrangements and commented on how it has helped them collaborate with other students in the class. This was a student-centred activity and I intervened to get a better clarity of what the students were suggesting. Most of the data reported through this data collection tool was a repeat of what was already mentioned in the student diaries. Nonetheless, it was a calming confirmation to see that students felt the same way after six weeks of research. Moreover, it was an excellent opportunity for students to compare one seating arrangement to another and establish what worked for them and what did not work for them in order to collaborate efficiently.

E. Data Analysis

According to Merriam and Tisdell (2015, p. 202), "data analysis is a complex procedure that involves moving back and forth between concrete bits of data and abstract concepts, between inductive and deductive reasoning, and between description and interpretation." Therefore, in order to make sense of my data, I used a thematic coding approach which involved a number of distinctive and yet inter-connected stages (Ritchie *et al.,* 1994). The stages included: familiarizing, identifying a thematic framework, indexing, charting, and mapping and interpreting.

The first stage was to acquaint with the richness, depth, and diversity of the data through an immersion into the data collected (Huberman and Miles, 2002). Therefore, I read and re-read all the data collected from this research study. This included the transcripts of the Student Led conferences, the participant diaries, my teacher-journal, and the critical friend feedback. The second stage was to identify key issues, concepts, and themes that occurred while revisiting the data. In this case, I found it best to look at each seating arrangement in isolation so as to better understand the challenges and merits of the classroom layout in relation to its impact on collaborative learning.

Furthermore, the third stage involved sifting and highlighting data, sorting quotes, making comparisons, and so forth to deduce meaning from the data set. Consequently, I used different highlighters for the positives and for the negatives of each seating arrangements. Additionally, I used a separate highlighter for re-occurring concepts under each seating arrangement and made notes on the margins of the data. Having applied the thematic framework, I removed the data from its original context and reorganised it in accordance to each seating arrangement (Rabiee, 2004). This process is known as charting, and it was followed by the last stage of mapping and interpreting the data set to get a holistic picture of the research study and the results obtained.

F. Ethical Considerations

The ethical considerations underpinning my research study were informed by the British Educational Research Association, BERA (2011). In this light, participants and parents were provided with a consent form that ensured

participation was on a voluntary basis and students could choose to opt-out "for any or no reason, and any time" (BERA, 2011, p. 6) (see Appendix B).

Participants and their parents were also provided with an information sheet in a child friendly language, stating the purpose of the research and their role in it (See Appendix B). According to BERA (2011, p. 7), "researchers must recognize the participants' entitlement to privacy and must accord them their rights to confidentiality and anonymity" and therefore, I used pseudonyms in this report. Additionally, I have stored all the data in password protected files, and student reflections are stored in a locked drawer that is accessible to myself and will be destroyed by April 2019.

Lastly, because my action research involved altering seating arrangements, I ensured that students' comfort and learning was not compromised by giving them options when necessary. The purposive sampling in this study raises question of ethics in terms of who should be included and who should be excluded. Nonetheless, I believe I picked participants who showed a spectrum of responses and there was a gender balance which may not have been the case with random sampling. The next chapter reports the findings and analysis of this research study.

Findings and Analysis

This chapter aims to report the findings and analysis extracted from this research study. In this light, this chapter will begin with an intervention followed be an examination of the six different seating arrangements (modular, rows and column, yoga mats, horseshoe, seminar, and a combination of an intimate circular and cluster) that were employed during the course of this study.

A. Intervention

At the beginning of this research study, I observed the challenges students encountered while working in cluster groups (these challenges will be explored below). Nonetheless, in order to address these challenges, I developed an action plan that included a range of seating arrangements as shown in Table I to promote collaboration among students in the classroom.

TABLE I
ACTION PLAN TO PROMOTE COLLABORATION AMONGST STUDENTS VIA
ALTERING SEATING ARRANGEMENTS

Order	Seating Arrangements	Collaboration Plan
1	Cluster Groups (Modular)	Group collaboration
2	Rows and Columns	Pair collaboration
3	Yoga Mats	Pair, Group and Whole class collaboration
4	U-shaped/Horseshoe	Pair and Whole class collaboration
5	Seminar	Whole class collaboration
6	Intimate Circular and Cluster Groups	Whole class and Group collaboration

The order of seating arrangements illustrated in Table I was decided primarily on the basis of the desired collaborative plan and the objectives of the lesson. For example, through the row and column seating arrangement, the agenda was to promote an intimate peer-peer collaboration among pairs in the classroom. The yoga mats were intended to foster all three collaborative practices however, due to the growing tension among students

in the group work phase, the U-shaped and seminar settings were implemented to enhance classroom community through whole class collaboration. Lastly, a combination of the intimate circular and the cluster group seating arrangement was employed to build on whole class collaboration and to re-introduce as well as assess group work among students.

The default layout of this classroom is a cluster seating arrangement as shown in Fig. 10 below. Accordingly, the generic features of this classroom are briefly described below.
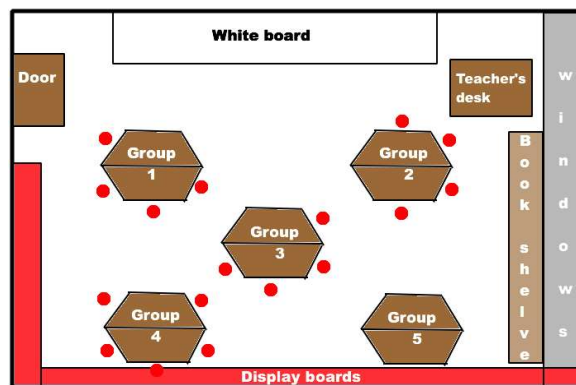
Fig. 10 Cluster seating arrangement in an RE classroom in Dar-es-Salaam, Tanzania

- **Tables and Chairs:** There are five hexagon shaped tables which are made of two trapezoid tables each. The standard classroom chairs are non-adjustable and non-cushioned (shown as red dots). Similarly, the tables are not adjustable in height. Nonetheless, the tables and chairs can be carried and moved around quite easily.

- **Teacher's desk:** The teacher's desk is located at the front, right-hand side of the classroom. It is usually stacked with the mainstream teacher's books, papers, files, personal belongings, and a non-accessible desktop computer.

- **White Board:** The white board is placed at the very front centre of the classroom. It usually serves as a multi-media board as well.

- **Windows:** The large windows are located on the upper right-hand side of the classroom, just behind the book shelves. The view outside exhibits the sky, clouds, and some tall trees. These windows allow natural light into the classroom.

- **Display Boards and Book Shelves:** The display boards (represented in red colouring) on the back and left-hand side of the classroom exhibit students' class work from the mainstream school. Additionally, the book shelves (represented in beige colouring) on the right-hand side of the classroom store several books belonging to secular school students.

- **Room as a whole:** The cluster seating arrangement as a whole suggests a very active and student-centred classroom. Nonetheless, because the property belongs to a secular school and students attend this class just once a week, a sense of belonging is lacking within this classroom.

B. Observing the Cluster Seating Arrangement

Vignette (Adopted from the teacher journal):

On this sunny Saturday morning, grade 8 students entered the RE classroom and sat down in Groups 1 through 4 (as shown by the red dots in Fig. 10). Correspondingly, I sat on the empty table (Group 5) to observe the lesson. After all the students had settled in, the teacher politely instructed the students to create a model of the city of Baghdad using the given chunk of playdough. There was no mention of time for this activity. Nonetheless, Groups 1 and 3 began working immediately with all seriousness. Group 2 had lots of arguments and rude remarks such as "you cannot do anything in your life properly" and "STOP IT! you are spoiling everything." Group 4 on the other hand, was having lots of fun throwing playdough at each other. The teacher walked close to group 4 several times and on one occasion, the teacher told a student; "I am not expecting this behaviour from you". Alas, when it was time for presentations, only Groups 1 and 3 had their models ready.

The teacher was clearly very upset and asked Groups 1 and 3 how they managed to complete their models in time. They responded as follows:

Group 1: "We had conflicting ideas, but we merged them and came up with a new idea that had a mix of the two ideas."

Group 3: "As long as we did our work, we could talk or whatever."

The teacher then asked Groups 2 and 4 why they could not finish their work on time, they responded as follows:

Group 2: "We were doing double, double work. We made one type of tree and they made another type of tree."

Group 4: "We kept playing with the playdough, nobody wanted to work."

After hearing their responses, the teacher instructed them to discuss potential solutions, they said:

Group 3: "divide the stuff in our group so that we don't repeat stuff."

Group 4: "if we don't work together we will never be able to complete it."

Group 4: "I think the groups should be shuffled."

Upon a short debrief with the host teacher (also my critical friend), *he commented that "the heat gets to the students which is why they act funny sometimes."*

Based on the vignette above, this cluster seating arrangement was suitable for the given collaborative task of creating a model of the city of Baghdad because it involved: (1) collectively recalling the lesson where they learnt about the city of Baghdad, (2) jointly making decisions regarding on what to include/exclude from the model, (3) mutually assigning the tasks for creating the model, and (4) presenting the model.

Correspondingly, the cluster seating layout allowed students to: (1) sit close to each other in an intimate setting (2) face each other and make eye-contact while discussing and making decisions, (3) have ample work space to work on the model, and (4) access the teacher easily. Nonetheless, as depicted in the vignette above, some groups succeeded whereas other did not.

One may ask, what potential factors may have led to the failure or success of the group works?

- Why did the Group Work Fail?

As illustrated in the vignette above, Groups 2 and 4 failed to complete the assigned collaborative task because of the potential reasons listed below:

(a) **Lack of adequate instructions:** Students were not given a specific time for the prescribed activity and therefore, some students started working immediately whereas other students took the task lightly.

(b) **Lack of communication skills**: Students in Group 2 were mean to each other. There was a blame game going on that slowed down their productivity level. Additionally, they reported doing double work. Perhaps, there was an issue with the division of labour or team spirit among the group members.

(c) **Group social dynamics**: Although students chose their seats on their own accord, it seems the social dynamics of students in Groups 2 and 4 led to the incompletion of their work. Students in Group 2 did not get along well whereas students in Group 4 got along very well such that they supported each other with staying off task.

(d) **Behavioural issues**: Students in Group 4 demonstrated behavioural issues such as throwing playdough around, not listening to the teacher, making fun, and not completing the assigned task.

- Why did the Group Work Succeed?

Accordingly, Groups 1 and 3 managed to successfully complete the assigned work because of the potential reasons explained below:

(a) **Responsibility:** Students in Groups 1 and 3 took charge of their learning; they were responsible for the work assigned to them. Hence, they began working as soon as the teacher had finished giving instructions.

(b) **Inclusion:** Students in Group 1 demonstrated team spirit by harmonising the ideas of all members and creating something unique.

(c) **Setting priorities**: Students in Group 3 had plenty of off-task conversations however, it was justified as long as they were also working on the assigned task.

The next step is to then use the strengths of successful groups work as an opportunity to further enhance collaborative learning in the classroom while also building on the weaknesses so that they no longer remain weaknesses. In this case, how can altering seating arrangements foster communication skills, create positive group dynamics, and correct behavioural issues? These are important to address because they directly impact collaborative learning in the classroom. Hence, the following section explores the rows and columns seating arrangement to address the challenges mentioned above. In this setting, the expectation was for students to practice and refine their communication skills with a peer whom they may have not previously worked with, so that in the long run, the social dynamics among students could improve and the classroom community could be further enhanced.

C. Bringing Back the Traditional Rows and Columns Seating Arrangement:

Vignette (Adopted from the teacher journal):

This warm Saturday morning called for the traditional rows and columns seating arrangement to enable students to have an intimate peer-peer interaction. There were three rows and three columns that enabled each pair to work on a single trapezoid like table (as shown in Fig. 11 below). In consultation with the host teacher, I assigned students with a number between 1 − 9, and an instruction to find their respective pairs with whom to seat on the same numbered desk. The grouping was established based on: (1) students who usually do not interact with each other and (2) students who are capable of either supporting others or being supported by others. In the beginning of the class, there were some moans:

Naeem: "Ahhh miss, do I really have to seat here?",

Suhail: "Noooo, Miss, can I please seat with someone else, please, Miss, please Miss."

Nonetheless, I did not budge with my decision, and I am glad I did not. I wanted students to work with new people so that they could improve their collaborative skills.

Once everyone had settled in, I instructed students to mutually agree on a controversial topic such as, "Does God exist? How was the world created?" and so forth. Students were then provided with the respective resources and asked to discuss their views on the chosen topic. Finally, students created a poster that demonstrated their learning. To re-iterate the agenda of the class; creating a positive classroom community, I teamed with the host teacher to role model the important characteristics of a good discussion. This included active listening, friendliness, and respect. Compared to last class, students were quite focused on the task. They were engaged in the discussions and I saw enthusing creativity in the posters. Intriguingly, I did not hear any arguments or quarrels among the pairs.
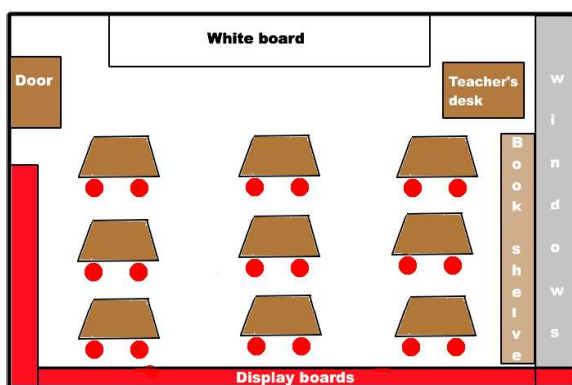
Fig. 11 Rows and Columns Seating Arrangement in an RE classroom in Dar-es-Salaam, Tanzania

In this case, the objective was to use the rows and columns seating arrangement to build students' communication skills as well as to create positive social dynamics among peers. According to Wannarka and Ruhl (2008), efficient communication skills among students can promote positive student-student interaction. And this, I believe reflects well in a thriving classroom community. The rows and columns matrix were suitable for the collaborative plan because (1) students could work with new people, (2) pairs had privacy for an intimate conversation on the chosen topic, (3) I could move from pair to pair swiftly, and (4) I could keep an eye on all students.

In the student journal, Naeem expressed positive feelings about working in pairs. He said, "*it is my first-time seating with my partner and I was comfortable seating with her. She is a great partner. We worked very well together, and the discussion was good.*" Similarly, Suhail stated, "*Although I was away from the people I usually sit with, it was actually fun sitting with new people.*" Amusingly, Suhail was one of the students who complained about the seating arrangement however, it seems he changed his mind after all.

On the other hand, Elina had mixed feelings towards the pair work. She said, "*it was nice to seat with someone I have never worked with, but it would have better if I would sit someone I know better.*" Whereas Suhail voiced, "*I liked the fact that we had the freedom to choose the topic, but I had to do all the work, so next time I would like to be with someone who can share the work.*" Evidently, some students felt they worked better with new people whereas others felt they could work better with their friends. The question then is how can a seating arrangement that allows friends or new people to sit together promote collaboration? (This will be discussed in the next chapter).

In the Student Led Conference, Suhail's partner, explained his dislike for this particular pairing because he felt intimidated by Suhail and therefore, did not contribute to the assigned task. He said, "*Suhail knows religion more than me, so sometimes I don't say anything,*" In this case, I assumed students could support or be supported in pair work. However, this was clearly not the case and hence, Vygotsky's (1978) theory of the Zone of Proximal Development (ZPD) was not practical.

To conclude this section, it is important to consider the comments shared by my critical friend, Mr. Zayn. He remarked:

"there was more interaction with the students seated in front. It was restricted to teacher and the pairs involved however it helped with classroom management (behaviour). Students were focused on the task and it was for the teacher to gauge students' work pace and to keep a closer on each of the students."

I did not realise that I interacted with students seated at the front more. In my head I thought I touched base with all the pairs and then spent more time with students who needed extra help. Additionally, the interaction was limited to me and the pairs involved and that perhaps gives an impression of a non-collaborative and teacher-centered classroom. Conversely, the point of this seating arrangement was to support the pair interaction rather than group work or whole class collaboration.

The next step was to continue building peer-peer interactions. In my understanding, these interactions are essential for students to practice their collaborative skills such that when students find themselves in a group setting, they may be able to apply some of their refined skills. Consequently, the

following section explores the impact of yoga mats to promote collaboration.

D. Getting Innovative with Yoga Mats:

Vignette (Adopted from the teacher journal):

On this hot Saturday morning, I got rid of all the chairs and tables in the classroom and laid out eight sturdy yoga mats on the floor of the classroom. My intentions to use yoga mats were three-fold; first was to build on the pair work that worked well last class, second was to bring the calm and ready to learn attitude which was important given the soaring temperatures. And third was to allow several opportunities of interactions in the classroom.

As students walked into the classroom, they were quite surprised to find the class without any furniture. This element of surprise made students excited about how the day would unfold. The layout of the day is explained in the three steps below:

Step 1. (pair work): To create a mind map after discussing and analysing an assigned piece of work from the curriculum.

Step 2. (Group work): To find a complimentary pair (who had the same piece of work assigned to them), share previous learnings and choose a mode of presentation to demonstrate learnings.

Step 3. (Whole Class work): To present and discuss the group work as a whole class.

The class began with pair work, followed by group work and lastly, a whole class collaboration (as shown in Figs. 12 (a)-(c) below). This time around, students were free to choose their seats in the pair work and whole class collaboration. Nonetheless, I decided which two pairs would merge to allow for an efficient group work. The purpose of this grouping was to give students an opportunity to closely interact with multiple people and refine their collaborative skills. Overall, these seating arrangements enabled movement and interaction in the classroom; students were not stationary, and they collaborated with multiple students in the varying seating arrangements. They were also visible and easy to access/monitor thanks to the removed barriers (tables and chairs).

During the pair work, students were focused on the task and interacted well with their peers. I noticed occasional off-task conversations however, I do not think that the learning and productivity of the students was hindered. In the group work, unfortunately, I witnessed fighting, telling each other off, and almost no productivity in certain groups. It seems that some groups found it difficult to mutually agree on a mode of presentation. Perhaps, it was too soon to bring group work back into the classroom. Students may have required more time to refine and practice their collaboration skills as well as build a positive classroom community. Conversely, changing to the U-shape setting, enabled a constructive and beneficial whole class collaboration. I was able to assess student learning.

After the debrief session, I asked students why they found it so hard to work in groups, one student responded that, "fighting is part of the process." And another suggested, "an incentive of prizes." However, this opened a whole debate on why "prizes are not good for us in the long run." Whereas these responses were excellent, I learnt that students collaborate very well in my presence. When the discussion is controlled, they argued constructively in a polite manner and demonstrated respect for me and other students in the classroom.
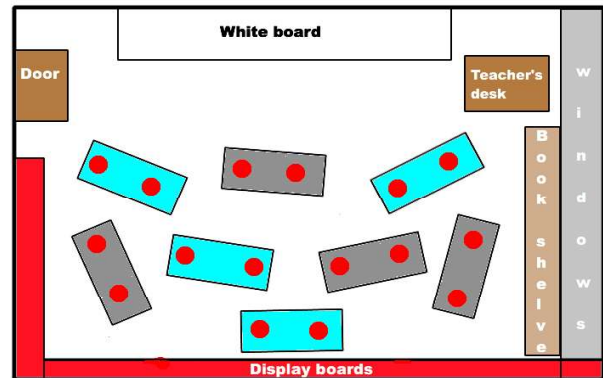
Fig. 12 (a) Yoga Mats for pair work in an RE classroom in Dar-es-Salaam, Tanzania
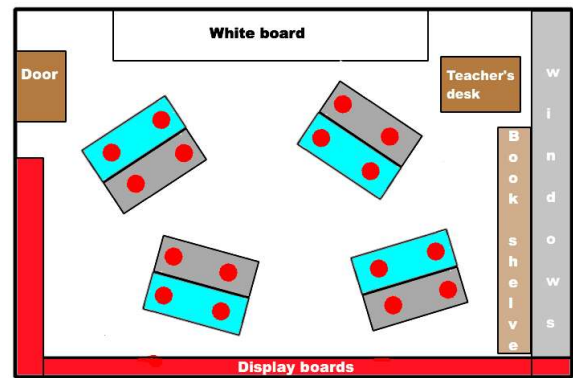
Fig. 12 (b) Yoga Mats for group work in an RE classroom in Dar-es-Salaam, Tanzania
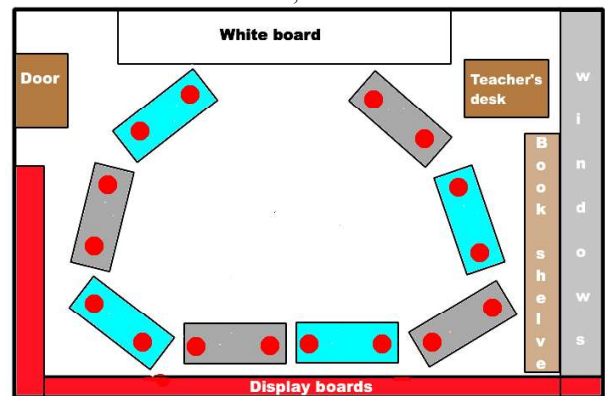
Fig. 12 (c) Yoga Mats for whole class collaboration in an RE classroom in Dar-es-Salaam, Tanzania

The diagrams above illustrate the three different classroom layouts that were achieved in one class. In this case, the environment catered to the desired type of collaboration among students. The mats were easy to move around and consequently, a smooth transition from one layout to another was possible. In Fig. 12 (a), students could sit face-face rather than sitting

adjacent to each other. Moreover, even though the mats were facing towards the front of the classroom, students could sit in any direction and easily turn to the desired side. In Fig. 12 (b), there was more working space among students as two yoga mats were merged. Students were seated in a cluster without barriers between them, and lastly, in Fig. 12 (c), the yoga mats were arranged in a U-shaped setting with an empty space in the middle for students to present their work.

The different seating arrangements were conducive to the respective collaborative learning; however, it seems that students were not yet ready to work in groups. In fact, Mr. Zayn commented that, "*students need more guidance on how to effectively work with each other.*" Therefore, the seating arrangements can only be effective once the foundations of collaborative learning are well understood by the students.

There seems to be a repeated pattern of why students cannot work in groups. To reiterate especially in light of this seating arrangement, there is a lack of communication skills such that students cannot listen to one another without quarrelling. They find solace in blaming others for the collective failure to complete the task and use harsh language to communicate their angry feelings.

Although the communicational skills of listening, friendliness, and respect are foundational, I cannot assume that my students would be experts at it. It seems that these skills, even though they are exceptionally crucial for collaborative learning, are perhaps, a life-long process. As Anderson and Soden (2001) rightly said, most adults today struggle with these collaborative skills in workplaces and therefore, it is unfair to assume Grade 8 students must master these skills.

Table II below demonstrates students' perceptions of the Yoga Mats seating arrangements (Adopted form the student journal).

TABLE II
STUDENTS' PERCEPTIONS OF THE YOGA MATS SEATING ARRANGEMENTS TO PROMOTE PAIR WORK, GROUP WORK AND WHOLE CLASS COLLABORATION

Students	How did the Yoga Mat seating arrangement affect your learning?	Would you recommend seating on Yoga Mats again? Yes/No? Why?	What did you like the most/least about class today?
Inaara	"The seating arrangement helped me learn because we were all together and there was only space between us, rather than material tables."	"Yes, because it created a friendly environment between everyone. I would not mind sitting on yoga mats as I get to sit with new people and learn from them."	"I liked the way we sat in a different environment and we worked with different people while being close to our friends."
Suhail	"It helped me understand that whether we liked each other or not, we had to work together otherwise it will be a loss to all of us."	"Yes. Because it is boring sitting on the same old chair."	"I liked the yoga the most and I wish we could do it for longer. I disliked the part when we kept fighting in the group work."
Elina	"In this seating arrangement, I got to work with many people and I learnt a lot from them."	"Yes! Because this idea was different, unique and totally fun!"	"Working in pairs with our friends and how the whole class came together and cooperated together."
Naeem	"It helped me learn how to interact, work and talk to people that I may not like/get along with."	"This seating arrangement is new and interesting and can be done once in a while but for me it was tiring to sit down for a long time."	"I really liked that it was easier to see one another but I feel I did not learn much about the content in the textbook."

As seen from Table II, students have a spectrum of responses about the seating arrangements based on what is important to them. In order to harmonise these responses, it is important to understand each student's distinctive voice. For example, Inaara linked the process of collaboration to her environment whereby she valued the friendliness and intimacy that was created due to the removed barriers between her and her peers. Elina, on the other hand, focused on her experiences of the multiple interactions with other students. Lastly, for Naeem and Suhail, they seemed to understand the crux of collaborative learning whereby in order to complete the given task, they had to find a way to work with people they may not necessarily like.

Suhail, Naeem, and Elina appreciated the uniqueness of the Yoga Mats and thus recommended it again. Nonetheless, Naeem expressed how it was uncomfortable to sit on Yoga Mats for a long time. Additionally, he explained how the focus of class drifted away from the content. In other words, because Yoga Mats as a seating arrangement was new to all the students, the focus was on it rather than on the curriculum.

Lastly, in terms of the different collaborative plans, Suhail expressed how he did not appreciate the fighting in his group work whereas, Elina voiced how the pair work and whole collaboration worked very well for her. This is in line with my observations of the different collaborative plans. Moreover, for Inaara and Elina, choice was important. Although they did not raise any concerns when I decided the groupings for the group tasks, they both appreciated free seating in the pair and U-shaped setting. McCorskey and McVetta (1978) echo the importance of choice in empowering students to make the right decisions for themselves. On similar grounds, the concept of choice emerged in the previous rows and columns seating arrangement when Suhail appreciated the freedom in choosing the topic of his own choice.

Considering the merits of pair work and whole class collaboration, the next two sections promote these collaborative practices through the U-shaped and seminar seating arrangements.

E. Promoting the Horseshoe Seating Arrangement:

Vignette (Adopted from the teacher journal):

On this Saturday morning, I arranged the tables in a U-shape (as shown in Fig. 13 below). Each trapezoid like table could fit two students who would then work as pairs. The purpose of this arrangement was to continue fostering pair work and whole class collaboration that had worked well in the previous class. The intent here was also to improve the social dynamics of the classroom such that students would be able to work with each other efficiently.

As students walked into classroom, I allowed them to seat wherever they liked as long as it was a boy-girl-boy-girl format.

Students were happy to take their chosen seats and we began class with a task that required pairs to mutually agree on the answers before filling the blanks of the worksheet. Even though each student had an individual worksheet, I noticed some constructive peer-peer interactions among students.

As a transition activity, students gathered at the empty space in the middle of the classroom for a guided cocktail conversation on reflecting and concluding the topic. Students were free to pick their buddy and almost all students chose to converse with their friends. I observed some off task talks among students but that was fine because they also discussed the questions assigned to them.

In the remainder of the class, the focus shifted to a whole class collaboration in which we created a narrative from the beginning of Islam until the Abbasids (610 − 1258). During this activity, I felt that I was on the lime light. Questions and answers were directed towards me and even though I tried to involve other students, I found myself talking more than anyone else.
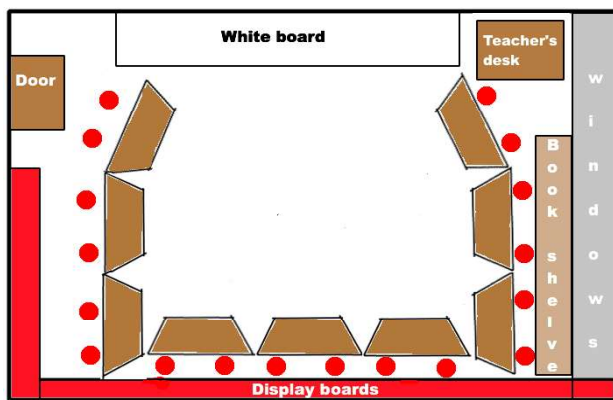
Fig. 13 Horseshoe Seating Arrangement in an RE classroom in Dar-es-Salaam, Tanzania

Fig. 13 above illustrates the U-shaped seating arrangement with all the students facing the front of the classroom. In this layout, students could see each other except for those students sitting on the same side of the room. Each trapezoid like table had two students and therefore, pair work was suitable in this layout. However, unlike the pairing in the yoga mats, pairs in the horseshoe setting sat adjacent to each other rather opposite each other and hence, they did not have as much eye-contact between them. The empty space in the middle was suitable for energisers and transitions from one activity to another.

The U-shaped setting was meant to enable a fruitful whole class collaboration however, not all students got an opportunity to speak and because the conversation involved me heavily, whole class collaboration was not achieved. This will be discussed in the next chapter in light of the teacher's role using the FLE (Facilitate, Listen, Engage) model to equate communication between the students and myself (Lloyd *et al.*, 2016). In this case, Mr Zayn strongly agreed with my observations and suggested that, "*students needed to be more active and engaged in the lesson.*" This mirrors Bonus and Riordan's (1998) findings on the importance of tasks in determining whether the class is teacher or student centric.

In the student diary, Elina said, "I understood way better from the beginning of Prophet Muhammad till the Abbasids, but I think we collaborated more in pairs than as a class." Similarly, Naeem stated that, "today's class was much quieter than previous classes." Suhail however, felt that, "the boy girl arrangement was cool, but some pairs were unfair because one person did all the work and the other person did nothing." Webb (2009) refers to this as social loafing which can lead to the sucker effect whereby the student (who does all the work) realises he or she has been taken for a free ride. Interestingly, this is the second time Suhail has mentioned the ineffectiveness of working with a partner even though he was not paired with the same student as in the rows and columns seating arrangement.

From my reflections of the whole class discussions in the Yoga Mat setting, I discovered that collaborated better in my presence. Nonetheless, the conversations then were about student presentations and a short debrief on how students can work well in groups. In this case, the topic of discussion was heavily content based, and it was driven mostly by me. Students were therefore disengaged, and the flow of the conversation was limited to me and a few vocal students.

The next step then was to give students an opportunity to engage in efficient collaborative learning such that I would be present among them, but I would not be the one talking. As Adedokun *et al.*, (2017) suggests, a learner centered environment involves students being independent of the teacher and the role of the teacher being limited to that of a coach. Hence, the following section explores the seminar seating arrangement which took place in the boardroom of the school. The intention here was to allow students to take charge of their learning and to treat them as important young people who are capable of having a productive discussion among them. I strongly believe that if students are empowered to collaborate well, they sure will.

F. Implementing the Seminar Seating Arrangement:

Vignette (Adopted from the teacher journal):

On this beautiful Saturday morning, class was held in the board room of the school. This was an air-conditioned room with boss chairs and a huge round table (as shown in Fig. 14 below). My intentions behind this seating arrangement included: (1) treating students as adults who have important things to say and (2) facilitating a student-led whole class collaboration. As a result, the air-condition and big chairs made students feel quite happy about the seating arrangement. In fact, Elina mentioned, "miss, can we please have class here every Saturday?" and soon after, other students echoed this idea.

Once all the students had settled in, I gave them random chits with topics that had been covered in previous classes. Students were given some time to prepare before speaking about their respective topics to the class. This exercise worked well because all students got an opportunity to speak. In the meantime, students who were not presenting were required to attentively listen and provide feedback to the presenters. I role modelled this activity by first being a speaker and then a

listener, however after this, I barely spoke, and I was quite impressed with students' prior knowledge of the topics assigned to them.

The next activity required students to read certain pages from the curriculum before discussing some true and false statements. This activity required students to pick a side and let others know of their decision through red flags (for false answers) and green flags (for true answers). I then randomly chose students to justify their stances. This created room for dialogue as students had strong opinions and ideas which they were eager to share. Moreover, this activity did not oblige students to necessarily be right or wrong. They were open-ended questions that necessitated students to pick a side and justify themselves.

On the whole, I was very happy with this seating arrangement. I feel that the cooler temperature in the room allowed me to facilitate better and everyone was in a good mood. In fact, we all laughed together on several occasions. Each student in the class spoke at least more than twice in the course of the day and I was quite satisfied with how well they worked as a whole class.

Fig. 14 above depicts the seminar seating arrangement with big chair shown as blue dots around the round conference table. These chairs had wheels and therefore were easy to move around. This room did not have windows, but the lights were quite bright. The teacher's desk was at the back, right side of the classroom however, it was not used because I chose to seat with the students on the conference table (shown by the green dot in Fig. 14).
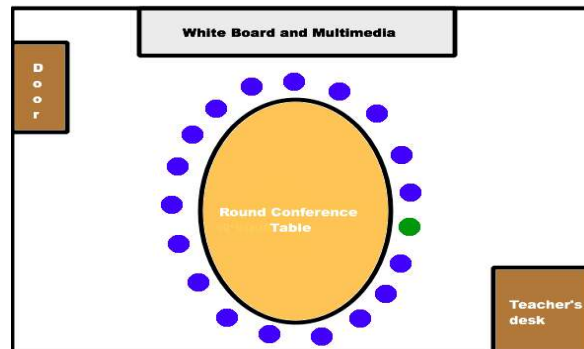
Fig. 14 Seminar Seating Arrangement in an RE classroom in Dar-es-Salaam, Tanzania

Based on the vignette, the seminar arrangement was building off from the previous horseshoe seating layout to promote whole class collaboration. However, the horseshoe seating arrangement was teacher-centered and therefore, this arrangement intended for students to be the focus point rather than the teacher. It attempted to promote whole class collaboration by creating a positive atmosphere. In this case, students did not have to mutually agree on anything or have to make joint decisions but rather the individuality of each student was highlighted. Each student made his/her own decisions and expressed their ideas to the whole class. Table III below demonstrates students' perceptions based on their participation in the class, how they felt about the seating arrangement, and their comfort level in this setting.

TABLE III
STUDENTS' PERCEPTIONS OF THE SEMINAR SEATING ARRANGEMENTS ON THEIR PARTICIPATION AND COMFORT-NESS

Student	Participation	Seating Arrangement	Comfort-ness
Inaara	*"I contributed in most of the activities. I discussed well and was an active and responsible member of the class today."*	*"I liked this seating arrangement because we engaged really well and laughed a lot which improved our overall mood."*	*"It was cool in this room and I could pay attention very well compared to the heat out there."*
Suhail	*"I participated very well. I answered questions and was confident."*	*"We were engaged really well. We worked as a team and collaborated nicely. Today's seating arrangement was the best seating arrangement."*	*"It was really comfortable because the chairs were soft and nice"*
Elina	*"I think I did very well in participating today. I actually focused and understood what was happening in class today."*	*"It was comfortable and fun sitting in this room today. I felt like a big person."*	*"I was very comfortable in class today and I also enjoyed a lot."*
Naeem	*"Since everyone was comfortable, everyone expressed their feelings really well and so did I. I felt a part of the class and really enjoyed today."*	*"I sat next to new people and they helped me learn new things."*	*"There was AC, so I was not feeling hot and the chairs were comfy."*

Students' perceptions in Table III demonstrate that they were comfortable in this seating arrangement. They appreciated the cushioned, big chairs and the air-conditioned room. Therefore, the physical layout of the classroom comprises of not just tables, chairs, and how they are arranged but also factors such as temperature and the overall atmosphere. Accordingly, the physical environment of the class can promote collaboration through the emotions it triggers in the students. Sawers *et al.,* (2016) remark that positive emotional responses elicited from an environment may create an attachment to the physical space. This means that the space could become a place where students look forward to be in and enjoying learning in. Additionally, Inaara highlighted the importance of the overall mood in

helping her engage with other students whereas, Naeem equated students' comfortability to student's expressivity.

Furthermore, Elina felt like a '*big person*' because of the chairs that are typically reserved for important meetings by the heads of the school. These emotions promote a positive learning environment which further enhances collaboration among students. It makes students feel '*responsible*' as Inaara mentioned in her student diary. This ownership and empowerment allow students to feel like their voices matter. As a result, student participation is increased.

According to Mr. Zayn, "this seating arrangement created a very positive classroom and students were engaged well." However, he was unsure of "how this seating arrangement was

linked to participation and collaboration". In other words, was it the seminar setting that promoted collaboration or was it the increased participation that promoted collaboration. Nonetheless, I strongly believe that all these concepts are inextricably linked such that the seminar setting enabled an increased student participation which in return enhanced collaboration among students.

In the U-shaped seating arrangement last week, several students went by without uttering a word. However, in this arrangement all students spoke at least more than twice. In fact, Suhail felt '*confident*' in articulating his ideas and viewpoints. Moreover, Elina felt she could '*focus*' more and '*understood*' the content of this class better. Interestingly, even though, students were free to choose their seats in this class, Naeem chose to seat next to students he did not know well, and as a result, he learnt from them. This has probably been the outcome of separating friends in the previous weeks such that Naeem felt the need to continue this tradition even though it was not required.

The last step was to re-introduce the cluster seating arrangement back. Nonetheless, it was too risky to have it by itself for the entire class. Therefore, an intimate circular seating arrangement was combined with the cluster setting to finally assess whether or not altering seating arrangement could promote collaboration among students.

G. Combining the Intimate Circular and Cluster Seating Arrangements:

Vignette (Adopted from the teacher journal):

On this lovely and last Saturday morning of my research study, I arranged the class in such a way that there was an intimate circular shaped seating arrangement in the centre and four cluster layouts in each corner of the class (as shown in Fig. 15). By an intimate circle, I mean cushioned sofas in a circular shape, without any barriers in between. My intentions for this seating arrangement were two-fold; to continue building on the whole class collaboration that worked quite well in the previous two classes and to re-introduce and assess group works among students.

We began class in the centre space where I instructed students to make their own groups. In order to ensure all students would participate, I assigned four roles in each chat station (time keeper, reader, writer, and leader). Students were required to assume a different role in each chat station. These activities required students to read the instruction sheets, discuss the questions provided, and to complete the short tasks. These short tasks necessitated that all four students participate equally. For example, in chat station 1, after reading about the term 'convivencia', which means 'peaceful co-existence', students were required to model it using four different right hands.

Each chat station took about 15 minutes and hence after about 60 minutes, we gathered back in the centre space to share our thoughts, ideas, and big learnings. To my surprise, there were hardly any major quarrels among students. On one occasion, I observed a group of three boys and one girl who became a little loud because they could not mutually decide on

something. *I was very tempted to intervene however, I chose to wait and see how the group leader would resolve the problem. And fortunately, he simply asked the students in the group to play 'rock, paper, scissors' to reach an ultimate decision. Soon after, these students were back on track and successfully completed all tasks assigned to them. On the whole, students were focused on the task and on some occasions, I saw some students helping their team mates. In the debrief session, all students shared at least one thing they learnt and hence all students spoke at least more than once. I was quite impressed to hear and assess students' overall learning.*
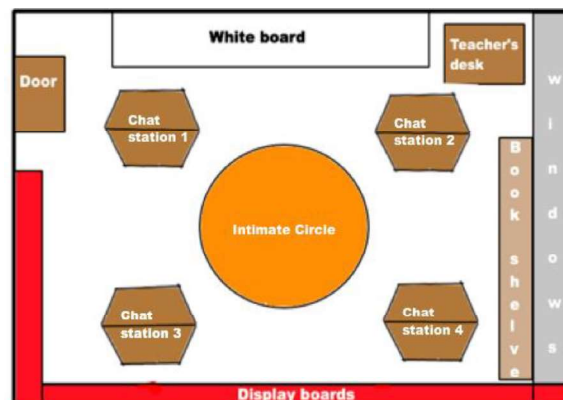
Fig. 15 A combination of an intimate Circular and Cluster Seating Arrangement in an RE classroom in Dar-es-Salaam, Tanzania

Fig. 15 above illustrates the combination of two seating arrangements: intimate circular and cluster. The centre space in the middle enabled an informal, lounge setting whereby there were comfortable couches with no tables between and the chat stations (labelled 1 through 4) enabled a formal, group work setting. The two arrangements were suitable for the desired collaborative plan: a whole class collaboration in the centre space and group work in the chat stations.

The vignette above depicts that group collaboration was re-introduced to the students in a more advanced manner such that a combination of a clear set instructions, roles, and timings were given to them. In this case, grouping did not matter because all students had responsibilities at each chat station. Hence, they were able to assume different roles. Interestingly, this setting did not stop students for quarrelling however, it enabled them to sort out their differences by themselves. This illustrates an ownership of their learning. As one student mentioned earlier (in the yoga mat debrief session), "*fighting is* [literally] *part of the process*." Table IV below demonstrates students' perspectives on participation, seating arrangements, and potential ways to collaborate more.

From Table VI, students remarked an increase in their participation. In this case, participation may be a precursor to effective collaboration. For example, Naeem equated participation to sharing his ideas and Suhail and Elina regarded participation to the contribution each student made in the group. In fact, Suhail reported no fighting and arguing which then resulted into a good group work. Nonetheless, it would perhaps be wrong to equate no fighting and arguing to good group work

because fighting and arguing are a part of the process, not just among students but also adults.

In relation to the seating arrangements, students appreciated both: the circular and the cluster settings. Inaara mentioned the importance of being intimate, without barriers and similarly, Elina emphasized on being able to see everyone. These may seem like small elements, nonetheless, they have a huge impact on students' learning. On another note, Suhail valued learning from friends and not just books and this is very important in collaborative learning. Given that Suhail has been the dominant one in the previous seating arrangements (rows and columns and yoga mats) and felt that he had to do all the work by

himself, it was pleasant to hear that he now found value in what his peers shared in the group setting.

Lastly, Inaara, Elina, and Naeem expressed how altering seating arrangements has helped them collaborate with others however, Inaara and Suhail added the importance of communication skills, especially friendliness is still required among their peers. On a separate note, Elina commented on the room temperature which (as shown from the seminar setting) was capable of bringing a positive atmosphere in the classroom environment. Having reported the findings and analysis in this chapter, the next chapter on discussions will aim to answer the three main subsidiary questions posed in chapter three.

TABLE IV
STUDENTS' PERCEPTIONS OF THE INTIMATE CIRCULAR AND CLUSTER SEATING ARRANGEMENTS

Students	Participation	Seating Arrangement	How can our class collaborate better?
Inaara	*"I think I participated well because I fulfilled all 4 responsibilities that I got in the 4 stations. I also learnt a lot."*	*"I liked both seating arrangements: the circle in the centre because we were all together and there were no tables separating us, and the chat stations because we all worked well in our groups."*	*"I feel we have been collaborating better now than before, but we need can do even better if we stop swearing and speak to each other nicely."*
Suhail	*"We had good group work, everyone contributed in the work and there was no fighting and arguing."*	*"The seating arrangements made me understand that I can learn not only from books but also from my friends."*	*"In my opinion, we can collaborate more if we continue to accept each other, work together and share ideas."*
Elina	*"I was an all-rounder and so were my team members. We occupied all roles in the group and everyone contributed."*	*"I liked the seating arrangements we could all look at each other and we could share our ideas."*	*"By continuing with the change of seating arrangements and maybe a class with air-conditioning."*
Naeem	*"I participated well because I shared my understandings about the topics discussed in the chat station and also in the circle."*	*"We were able to collaborate better and give equal ideas and equal participation in the group."*	*"I think whatever we have been doing past weeks has been helping and I think we should continue trying new seating arrangements that will make us more comfortable and help us collaborate more."*

TABLE V
A SUMMARY OF THE BENEFITS AND CHALLENGES OF THE SIX SEATING ARRANGEMENTS

Seating Arrangement	Benefits	Challenges
Cluster	• Close proximity • Ample work space • Eye-contact	• Off-task conversations, disruptions, and behavioural issues • Irritability due to heat
Rows and Columns	• One-one interaction in pods • More talk time for each student • Productivity and on-task behaviour	• More teacher-student interaction at the front • Minimum interactions with other students
Yoga Mats	• No barriers • Flexible and easy to move around • Allows for movement between activities • Close proximity • Eye-contact • Opportunity for multiple interactions • Uniqueness	• Uncomfortable for long hours • No writing and work space • Lack of communication • Requires additional transition time • Required outsourcing
Horseshoe	• Eye-contact • Ample centre space	• Minimum student-student interaction • Teacher-led • Fan pattern
Seminar	• Positive classroom climate • Positive emotions due to low temperature (air-condition) • Increase in participation • Close proximity • Big comfortable chairs • Eye-contact	• Not feasible in the long run due to unavailability of the room
Intimate Circular and Cluster	• Responsibility and accountability • Positive classroom climate • Minimum teacher intervention • Movement and transitions • Intimate (no barriers) • Close proximity • Eye-contact • Productivity and on-task behaviour • Uniqueness	• Required additional transition time

IV. DISCUSSION

This chapter aims to answer the three subsidiary questions queried in chapter three so as to bring together a concrete understanding of the findings and analysis of this research study. In this light, this chapter will highlight the benefits and challenges of the six seating arrangements and embed students' perspectives in terms of the four collaborative patterns: pair, group, whole class, and combinational. Lastly, this chapter will conclude by discussing the teacher's role in promoting collaboration in the classroom.

A. Benefits and Challenges of the Six Seating Arrangements

Cornell (2002, p. 33) suggests that, "furniture is both tool and environment." In agreement, this study established that furniture had dual responsibilities. The idea that furniture is a tool reciprocated in its ability to promote collaboration, whereas furniture as the environment served to create an atmosphere that was conducive to collaborative learning. In this section, both aspects of the furniture will be discussed with regards to the benefits and challenges of the six seating arrangements.

According to Chamber (2004), there is not one arrangement that is better than another. This idea was mirrored in my previous study of seating arrangements in UK mainstream school, and again in this study as well. Nonetheless, seating arrangements are not full-proofed. There are positive as well as negative elements attached to each seating arrangement as shown in Table V.

Table V above depicts an extensive list of positives and negatives that were elicited from the findings and analysis in the previous chapter. Interestingly, a key message extracted from this process is that seating arrangements cannot be studied in isolation of the several concepts that are sheltered under the umbrella of collaboration. For example, one may ask, how does close proximity to group members in a cluster seating arrangement aid collaboration among students? Or how does participation in the seminar seating arrangement foster collaboration among students? Alternatively, how does insufficient workspace inhibit collaboration? These are important questions and will be addressed in the sub themes of pair, group, whole class and combinational collaboration. The collaboration plans carried out within the seating arrangements are listed in Table VI for ease of reference.

TABLE VI
A SUMMARY OF THE COLLABORATION PLANS AND THE RESPECTIVE SEATING ARRANGEMENTS

Order	Collaboration Plans	Seating Arrangements
1.	Pair collaboration	Rows and columns, yoga mats, horseshoe
2.	Group collaboration	Cluster, yoga mats, intimate circular and cluster
3.	Whole class collaboration	Yoga mats, horseshoe, seminar, intimate circular and cluster
4.	Combinational collaboration	Yoga mats, horseshoe, intimate circular and cluster

- Pair Collaboration:

Pair collaboration requires two students to work together to achieve a shared goal (Roschelle and Teasley, 1995). In this study, pair collaboration was achieved in the rows and columns, yoga mats, and U-shaped seating arrangements (as shown in Table VI above). According to Richards and Farrell (2011), pair work among students allows opportunities for sustained interaction due to the increased student talk time and promotes communicative competence. Additionally, Barron (2000), emphasized that peer- peer interactions provide practice for constructive dialogue. Particularly in a RE classroom, pair collaboration allows for an intimate one-one interaction which is necessary because it allows students to strongly think about their beliefs and experiences which are vital to understanding their religion better.

The findings of pair collaboration in the rows and columns seating arrangement exhibited privacy among students such that they were able to have an intimate conversation on the topic of discussion. Moreover, unlike the rows and columns and the U-shaped seating arrangements, the yoga mats setting enabled pairs to sit face-to-face rather than side-to-side and thus, students were able maintain eye-to-eye contact. This is an important non-verbal gesture that validates the ideas, opinion, thoughts, and feelings of the speaker (Kinahan, 2017). Furthermore, the intimacy between students was enhanced due to the removal of barriers such as tables and chairs between them (in the yoga mats setting). Students in this study have identified such as space as a 'friendly environment." In other words, students were able to view the classroom as a safe space (Muijs and Reynold, 2000).

According to Holley and Steiner (2005, p. 50), the metaphor of the classroom as 'safe space' was extracted from a description of a positive classroom climate that, "allows students to take risks, honestly express their views, and share and explore their knowledge [with peers]." In fact, the intention behind bringing back the traditional rows and columns and the innovative yoga mats was to create a positive classroom climate by fostering new and existing friendships. Nonetheless, there is a debate in literature about whether students should sit with peers who they consider as friends or peers who are not yet friends (Gest and Rodkin, 2011). The former respects student preferences as well as reinforces the existing friendships whereas, the latter promotes new friendships and social connections.

In this study, there were mixed responses on how the pair works operated such that some students found it beneficial to sit with new people whereas others preferred sitting with their friends. Unfortunately, there is a risk associated with new pairings because students may either work well together or they may not work well together. Consequently, making pairs is a complex chore and requires an accurate understanding of the social dynamics in the classroom (Kinahan, 2017).

Using the Vygotskian (1978) principle of ZPD, I collaborated with the host teacher to determine the best pairings in light of students who have not interacted much with each other, and students who are either capable of supporting others or of being supported by others (in the rows and columns seating arrangement). However, in practice, this did not work out as expected. Placing a more-abled student with a less-abled student did not result in positive outcomes for either of the

students. In fact, it gave way to the dominant, more-able student to do the task by himself, feeling the burden of the extra work, and simultaneously, challenged the confidence of the weaker student who felt intimidated by his partner. Similar to Baines *et al.'s* (2009), study, my analysis of this particular situation concluded that trust and the notion of helping were lacking among students; the partners did not have faith in each other and the idea of supporting each other was absent. Nonetheless, having repeated pair works three times during the course of this study, I strongly believe that a positive classroom climate can resolve these issues.

Richards and Farrell (2011, p.107) referred to classroom climate as "the feelings students have towards the lesson, the teacher and other students, and the learning atmosphere of the classroom." However, in many cases, students fail to build social competence and thus choose to avoid or blame their peers (Baines *et al*., 2009). By contrast, when students were given the freedom to choose their partners during the pair work in the yoga mat setting, they all chose to sit next to their friends. Results from this study demonstrate that students appreciated the liberty to select who they wanted to seat next to. According to Van den Berg and Cillessen (2015), allowing students to sit with their friends may distract them by off-task conversations that inhibit collaboration. However, who decides when off-task conversations are harmful and when can they be negligible? Dyson (1987) explains that as long as students' productivity in not hindered, off-task conversations can be overlooked. In fact, such off-task conversations may be beneficial in promoting new or existing friendships thereby enhancing a positive classroom community. In this study, off-task conversations did not hinder students' productivity or learning. Hence, this research suggests that pair work is an effective first step to build a positive classroom community and foster successful collaboration.

In conclusion, for students to effectively work in pairs, they need the physical chairs and tables (or yoga mats) to be positioned in a manner that gives students an opportunity to have an intimate and open conversation about the topic of discussion. However, they also require a safe environment that enables them to be able to express and share their thoughts. As Webb (2009) rightly suggested, peer-peer interactions can lead to a restructuring of the existing knowledge base because the dialogue component allows for students to elaborate and deepen their thoughts and understandings.

- Group Collaboration:

Group Collaboration takes place when a small number of students, preferably four, work together towards a common, shared goal (Reference, year). In this study, group work was observed in the very first class, and it was implemented during the yoga mats and the combined cluster seating arrangements (as shown in Table VI above). According to Summers *et al*. (2005, p. 170), group work can enhance "positive interdependence, accountability, cognitive development, and social development [among students]." In practice however, group collaboration is more complex than it appears to be.

Firstly, when students are seated in groups, it does not automatically mean successful collaboration is going to take place (McCorskey and McVetta, 1978). Whereas, the correct physical arrangement is necessary for effective collaboration, this study reveals that students require effective collaborative skills; especially communication skills to collaborate efficiently. Webb and Palincsar's (1996), study also illustrated that when students lack communication skills, they cannot engage effectively in group interactions. These skills however, cannot be taught to students in a short period of time. It is a continuous process in which students require several opportunities to refine and practice these skills through multiple interactions with peers.

An alarming lesson from this study was that effective and good group work equated to no fighting and arguing. O'Donnell (2006) claims that if students got along happily and did not argue among themselves, then their creativity and imagination would be highly diminished. In reality, students should not be pressured to reach a consensus because it takes away their individuality and uniqueness. Instead, they should feel empowered to voice their opinions and share their ideas freely.

Participants in this study suggested two important ideas that emerged in an attempt of making groups work: (1) fighting is part of the process, and (2) harmonising the different voices to construct a unique one. It is often difficult for adults in work places to agree with each other and most times, they agree to disagree with each other, and if this is a challenge for adults, how can we expect students to be experts at mutual consensus?

On the contrary, students must also familiarise themselves with the art of working with other people in a cohesive manner (Reference, year). This study revealed that when group tasks were more structured, students performed better. Structure in this context refers to assigning roles and responsibilities to group members. According to Cohen and Lotan (2014), when roles are clearly assigned to group members, the quality and productivity of work becomes the group member's responsibility. In other words, students take ownership of the task at hand and are motivated to play out their share. Assigning roles to group members sounds synonymous to the idea of 'divide and concur' which is how cooperative learning works (Roschelle and Teasley, 1995). However, the intimate and circular seating arrangement demonstrates that students can have separate roles and yet work together to achieve a common goal.

- Whole Class Collaboration:

Whole class collaboration involves entire class where all students and the teacher work towards a common goal (Dillenbourg, 2002). In this study, whole class collaboration was adopted in the yoga mats, U-shaped, seminar, and circular seating arrangements (as shown in Table VI above). According to Richards and Farrell (2011), whole class collaboration can lead to achievement of lesson objectives quickly and effectively since time management is maximally under the teacher's control. However, this study demonstrates that whole class collaboration can only work when the teacher and all students, each contribute equally to the discussion in place.

Unlike Parson's (2016) findings, students in this study did not feel accountable in the horseshoe seating arrangement. Moreover, Shipman's (2008) theory of increased participation in this arrangement was not visible. And, Wannarka and Ruhl's

(2008) principle of increased communication in this arrangement did not materialize either. In fact, O'Hare's (1998) fan pattern of interaction which was associated to a rows and columns seating arrangement was evident here whereas, the prescribed web pattern of interaction for this particular seating arrangement was not observed. One may ask, what went wrong? Why are all these scholars proved wrong in this context? Well, in this case, the task assigned was content heavy and involved me significantly. Therefore, there was limited accountability, participation, and communication on the students' part. In other words, Baines *et al.*'s (2009) third principle of setting the right classroom activities that foster group was lacking and therefore, even though the seating arrangement was catered for a web pattern of interaction, the fan pattern was predominant.

On the bright side, upon using the plan-act-observe-reflect model of the action cycle (Zuber-Skerrit, 2001), the seminar setting in this study illustrated that students equated comfortability to expressivity. Comfortability in this context refers to the physical chairs that students sit in, the temperature of the room, the technology utilised and so forth (Chamber, 2004). However, the comfortability in the physical learning space has shown a positive emotional state whereby students are in a good mood and feel confident to voice their thoughts (Sawers *et al.*, 2016). Moreover, expressivity refers to students' willingness to participate in the classroom. Therefore, when students feel like their voices matter, similar to the 'safe space' discussed during pair work, they feel empowered to participate and communicate their thoughts, thereby accomplishing Cornell's (2002) usability aspect of the physical learning space.

In conclusion, this study has shown that seating arrangements cannot be viewed in isolation because there are many other factors that contribute to students' learning process. These include and are not limited to student accountability, participation, and communication, all of which require careful planning in terms of the tasks assigned to students so as to promote collaboration.

- Combinational Collaboration:

Combinational collaborative learning involves a transition from one type of collaboration to another with the aim of achieving a common goal. In this study, combinational collaborative learning was implemented in: (1) yoga mats setting where students transitioned from pair to group to whole class collaboration, (2) the U-shape setting where students switched from pair to whole class collaboration, and lastly, (3) the final intimate circular and cluster seating arrangement, where students moved from whole class to group to pair work (as shown in Table VI above).

The main advantage of the combinational collaboration is that it allows for movement in the classroom. According to Blackmer (2018), movements may include short walks, stretches, or yoga poses in the classroom. These movements are necessary to increase blood flow throughout the body and particularly to the brain. Scientific outcomes of such movements include an "increase in creativity, memory, attention span, focus, and mood" (Blackmer, 2018, p. 13). Unfortunately, this study could not directly measure these

outcomes. Nonetheless, movement in the combinational seating arrangements allowed for multiple interactions in the classroom. As a result, students were able to get a short social break in which they could communicate with their peers (Benes *et al.*, 2016). Although the communication in this case was not relevant to the content of the classroom and required additional time, I believe it gave students a mental break and enabled them to re-focus for the next activity. Additionally, as a result of the movement, students were able to interact and work with more people in the classroom (Wannarka and Ruhl, 2008). Consequently, they received multiple opportunities to refine and practice their collaborative learning skills.

Another benefit of the combinational collaboration stems from its uniqueness. Students are normally used to a particular classroom layout. In this case, the default setting was a cluster seating arrangement. However, upon encountering something new, students' interest, engagement and participation increased (Sawers *et al.*, 2016). Students in this study appreciated the uniqueness of the yoga mats. In fact, Suhail expressed how '*tables and chairs* [can be] *boring*'. Additionally, the surprise element of what's going to happen next kept students engaged and excited. Hence, students in this context liked the change of environment.

In summary, this section demonstrates that seating arrangements can create a conducive environment that fosters collaboration. However, there seems to be an indirect relationship between seating arrangements and collaboration. What this means is that seating arrangements cannot necessarily make students work together to achieve a common goal but rather it can impact several factors which may then lead to enhanced collaborative learning among students. Fig. 16 below re-iterates the factors that can contribute to a successful collaboration.
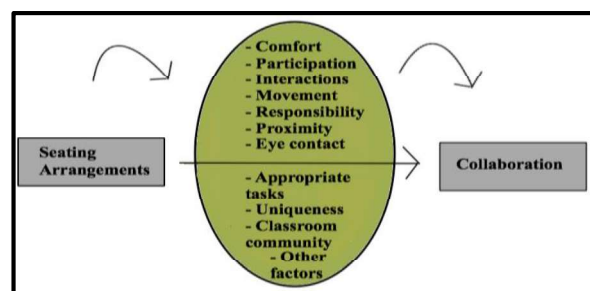
Fig. 16 An illustration of how seating arrangements impact collaboration in the classroom

The 'other factors' demonstrated in Fig. 16 includes work space, temperature, positive emotions, and so forth. Undeniably, the list can be long. Nonetheless, these factors can only materialize through a vision of the teacher who values collaborative learning in the classroom. Hence, the next section explores the role of the teacher in this endeavour.

B. The Teacher's Role:

As mentioned in chapter two, the teacher plays a critical role in ensuring that the classroom environment is conducive to students' learning. Nonetheless, the teacher may have several

obstacles in implementing changes to the classroom layout. In this case, the teacher's primary role is to continuously alter the physical layout of the classroom so as to make it a space in which students enjoy learning and the objectives of the let are met. As concluded from the UT essay, this Moreover, through this research study, I have concluded that the teacher's role is best suited as a facilitator in order to successfully foster collaboration among students.

A facilitator in this context refers to someone who role-models what is expected from students (Swenson, 2008), scaffolds instructions appropriately (Sztejnberg and Finch, 2006), and collaborates with students to achieve the objectives of the lesson (Lloyd *et al.,* 2016). According to Farmer *et al.* (2011), the teacher's actions and words are well communicated to the students. Therefore, the teacher must continuously exemplify the communicational skills and behaviours that are expected from the students. As a new teacher in the field, it is very easy to shift from a student-centered space to a teacher-centered space. It is almost unintentional as seen in the horseshoe seating arrangement. Nonetheless, Lloyd *et al.* (2016) propose the FLE (Facilitate, Listen, Engage) model to enable teachers to excel in their roles as facilitators. In this model, students are placed parallel to the teachers and a horizontal communication pattern, similar to the web pattern is observed. The teacher lays the foundations for the listen and engage phases and then slowly withdraws from the focal point so as to allow students to effectively participate and collaborate in a whole class discussion (Lloyd *et al.,* 2016).

In this study, I role-modelled what a good discussion looks like in the horseshoe seating arrangement and in the transition from a speaker to a listener during the seminar setting. However, the FLE model was applied only to the seminar seating arrangement and excitingly, this layout had the second most positive outcomes in terms of students' collaboration. Consequently, this study validates the FLE model in light of catering for a student-centered classroom.

Pointon (2000) suggests that the physical layout of a classroom suggests a reflection of the teacher's priority. In this light, Kaya and Burgess (2007) claimed that a teacher who still values a teacher-centered classroom, is likely to adopt the rows and columns seating arrangement whereas, a teacher with a student-centered mindset will embrace the modular or horseshoe arrangements. Nonetheless, I believe this is a toxic generalization that perhaps paints a negative picture of teachers who use the rows and columns seating arrangement (especially in contexts like the UK, where the arrangement is predominant). In this research, the horseshoe arrangement was more teacher-centered than the rows and columns seating arrangement. Consequently, the physical layout of a classroom does not necessarily convey teaching philosophies. Instead, as Bonus and Riordan (1998) correctly said, the efficiency of any physical layout is determined by the activity assigned to the students.

In conclusion, this study reveals that students and teachers are equally responsible for successful collaborative learning. In particular the role of a teacher is to creatively alter the physical layout such that collaboration can efficiently takes place.

Moreover, the teacher's role is synonymous to that of a facilitator in role-modelling, scaffolding and effectively collaborating with the students. Pointon (2000) suggests that one way of hearing students' voice is through open discussions about the classrooms in which they prefer to learn.

V. CONCLUSION

This chapter will conclude the dissertation by bringing together the key findings extracted from the responses of the three subsidiary questions in chapter five and thereby responding to the main research question of the study. Additionally, this chapter will highlight the significance, limitations and further recommendations for this study. And lastly, this chapter will end by critically reflecting on my journey through MTeach and beyond.

A. Key Findings

The main subsidiary question, "how do seating arrangements impact collaboration among students in an RE class in Dar-es-Salaam, Tanzania?" concludes that seating arrangements may foster collaboration indirectly through a variety of concepts that fall under the umbrella of collaboration. In other words, seating arrangements cannot be viewed in isolation. Concepts such as participation, movement, comfort, and so forth can bridge the gap between seating arrangements and collaboration as shown in Fig. 16 (see chapter 5). Additionally, this study validates Baines *et al.*'s (2009) relational approach in which successful group collaboration not only requires conducive seating arrangements but also the appropriate activities that foster collaborative learning among students.

Moreover, this research study validates the Cornell's (2002) usability and functionality approach to seating arrangements. The physical layout of the classroom is instrumental in creating a favourable environment for collaboration to efficiently take place. In this light, each seating arrangement may cater for a particular type of collaboration (pair, group, whole class), and depending on the objectives of the lesson, the teacher may adopt a suitable layout that fits the collaborative plan. The teacher's role in this endeavor is to creatively alter the classroom layouts so as to make it conducive to a collaborative learning environment. Equally, the teacher assumes the role of a facilitator to constructively role-model the desired communicational skills and behaviour as well appropriately scaffold instructions such that teacher invention is kept to the minimum.

Furthermore, this study recommends the use of a combinational collaborative approach which allows students an opportunity to interact with multiple students while catering for movements in the classroom and swift transitions from one activity to another. These movements and transitions have shown to sustain student engagement and participation in the classroom. Excitingly, this approach is also in line with the idea of allowing students with several occasions to practice and refine their collaborative skills.

Lastly, from the students' perspectives, the liberty to make choices is important and whereas teachers can be decision makers, they do need to provide options from which students

can choose from. Equally, students in this study have shown responsibility towards learning when: (1) a clear set of roles were prescribed to them (intimate circular and cluster) and (2) when they felt their voices mattered (seminar). In fact, students in this context have linked comfortability to expressivity. Consequently, a comfortable physical layout of the classroom can empower students to voice their thoughts and opinions, thus promoting collaboration amongst them.

B. Significance of Research Study

The findings of this study balance the mismatch between the importance of collaborative learning in today's classrooms and the physical learning spaces provided for it. It sheds light into a powerful relationship between seating arrangements and collaborative learning in the classroom. This study highlights the creative role of the teacher to actively manipulate classroom arrangements to fit the collaborative plan and objectives of the lesson. Additionally, this study emphasises the importance of students' voice because there can be a difference between a teacher's judgment of a good classroom in which to teach and a student's view of what is a good classroom in which to learn. Consequently, harmonising the teacher and the students' perspectives can ensure successful teaching and learning.

C. Limitations of Research Study

As all research studies, this study too had certain limitations. First and foremost are my own biases and pre-conceived notions of the various seating arrangements and their roles in promoting collaboration among students. However, the phenomenological approach employed in this study meant that I was engrossed in the perspectives and experiences of my participants and consequently, I did not include my biases. Additionally, Mr. Zayn's critical lens aided this process by ensuring that my decisions were in favour of students' successful learning. Hence, even though my biases may have not be completed eliminated, I can consider it to be reduced to the minimum thus, rendering my data as valid and reliable.

Secondly, the small-scale of this research project raises issues of generalizability especially due to purposive sampling strategy. Nonetheless, this study claims fuzzy generalizations which may or may not apply to other contexts (Bassey, 1998). Additionally, it is through evidence-based practice that teacher-researchers may solidify their fuzzy generalizations and thus, add value to the wider literature corpus (Bassey, 1998). Therefore, the data reported in this study is specific to the RE class in Dar-es-Salaam and does not claim broader applicability.

Lastly, like any other research, my participants were fully aware of their participation in this research project and hence, this research is subject to "the Hawthorne effect", whereby the data collected could be affected by the participants' awareness of the research topic (Gail *et al.*, 2000, p. 427). This may be the case for student diaries in which they could shy away from writing negative remarks. Nonetheless, the purposive sampling meant that I hand-picked students who I thought would voice their perspectives regardless of whether the remarks were positive or negative. Additionally, the triangulation of data meant that other sources of data were equally considered before reaching conclusions.

D. Further Recommendations

This research has established that seating arrangements are instrumental in creating a suitable environment for collaborative learning. Additionally, this study has discovered an emotional aspect as result of the physical environment in which students' collaboration may be affected. Moreover, when students form new groups, a different social context is created in which students may either have positive or negative experiences. Consequently, in both cases, there is an emotional element which may either hinder or promote collaborative learning. Therefore, moving forward, it will be noteworthy to see the two-dimensional (physical environment and new groupings) impact of emotions on collaboration.

E. My journey through MTeach and Beyond

Having completed the MTeach journey, I feel empowered and motivated to positively impact young individuals in Dar-es-Salaam, Tanzania. I feel equipped with the resources required to fulfil my role as a STEP teacher and to creatively respond the challenges that may arise in the field. This does not mean that I have learnt everything I needed to. In fact, my philosophy of teaching from the Professional Development Portfolio, (PDP) of a life-long learner and of attaining a growth mindset are strongly present and active in my everyday life.

The research topic detailed in this dissertation stemmed from the Understanding Teaching, (UT) module in which I learnt the true essence of being a critical reflective practitioner. I realised that there is not a single classroom layout that works best for all collaborative learning and it is through trial and error that the teacher may come to know the combination of classroom layouts and collaborative strategies that works well. Moreover, in the Leading Learning, (LL) module, I met my teaching-self. I gained a profound sense of identity that enabled me to communicate and justify the choices I made in the classroom to a wider community of leaders. I saw a vivid transformation from practical knowledge to professional knowledge as I voiced the tacitly held knowledge within me, and this taught me that "collaboration is at the heart of teacher leadership" (Muijs and Harris, 2003, p. 8). Furthermore, in the Research and Professional Practice, (RPP) module, I gained a better understanding of what 'good' educational research entails, and how I could replicate this knowledge into my own research study. Through this reflection, I gained deeper insights into the relationship between research and practice.

Lastly, through the Practice-Based Enquiry, (PBE) module, I have come to appreciate the dual role of a teacher-researcher. I have come to value educational research more and feel empowered to make better-informed decisions about my teaching practise. I have also gained awareness of the multifaceted factors that affect processes of learning and as Strauss (1995, p. 37) rightly says, it is indeed a "liberating experience." My future teaching experiences in the classroom will likely focus more ensuring a conducive environment in which students enjoy learning and the objectives of the lesson

are also met. In this light, I will continually strive to creatively alter the physical layouts of the classroom to enhance participation, interaction, and all the other factors discussed earlier. In my role as a facilitator, I will explicitly and implicitly role-model the behaviour I would expect from my students, scaffold instructions appropriately, and treat students as parallels. Of course, there will be some authority established in the classroom nonetheless, I will incorporate students' voices as well as provide for choices whenever possible. Most importantly, I will continue the action research cycle of plan-act-observe-reflect to continually expand my understanding of how seating arrangements can enhance collaboration.

APPENDIX

Appendix A:

Three layouts experimented in the Understanding Teaching module:

Layout 1: Desks Merged Horizontally
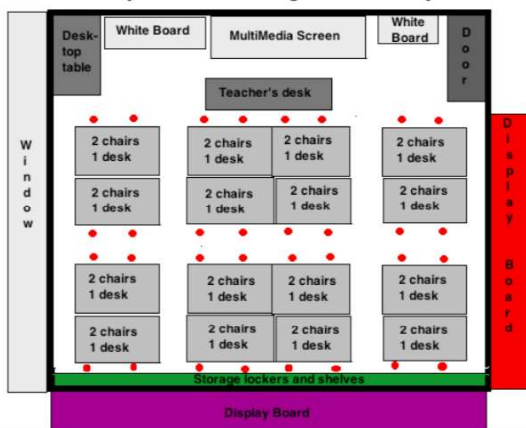
Layout 2: Desks Merged Vertically
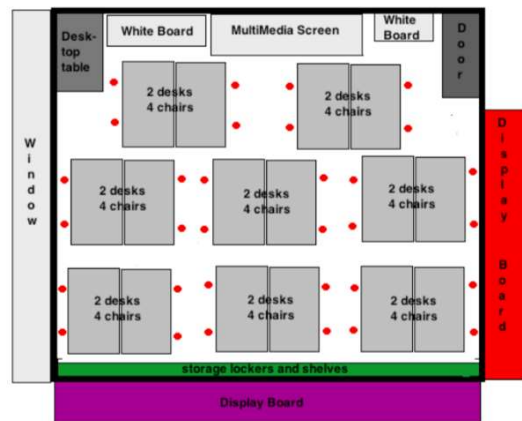
Layout 3: Whole Class Collaboration
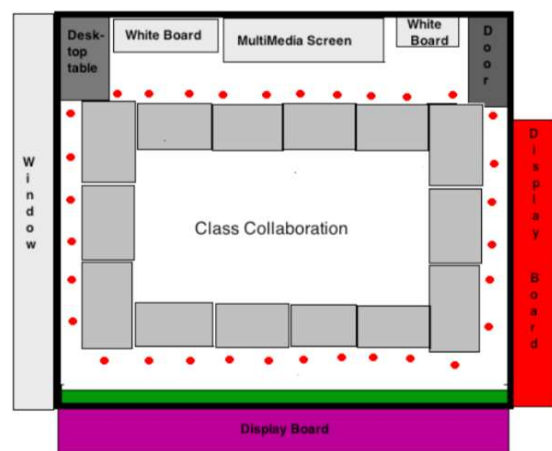
Appendix B:

Information Sheet and Consent forms (participants, parents, and adults):

The Institute of Ismaili Studies

Institute of Education UCL

Information Sheet STEP MTeach Research

Project Title: Sitting comfortably in an RE classroom.

Researcher's Name: Miss. Alisha Esmail

Contact Details: Email: alishaesmail@iis.ac.uk

I would like to invite you to participate in this research.

Details of the Research Study

Why am I doing this project?

This project is part of my STEP Master's Degree at the Institute of Ismaili Studies and the UCL Institute of Education. It is hoped that the project can provide useful information about how innovative seating arrangements can enhance collaborative learning in the classroom.

What will you have to do if you agree to take part?

You will have to read and sign the consent form to take part in this research. Additionally, the following will be applicable to all participants.

- I will arrange a time to meet, which is convenient for you.

- There will be an individual student led conference with myself, which will take approximately 30 minutes.
- I will ask you to share the following documents with me: student reflective journal

Will your participation in the project remain confidential?
Yes, if you agree to take part in this research, your name and responses will remain confidential. All data collected will be stored in password protected files, and all worksheets will be kept in locked drawers that will be accessible to myself. Therefore, you can be assured that your identity will remain anonymous.

What are the advantages of taking part in this project?
This research will give ITREB, Tanzania a better understanding of how seating arrangements can help students learn together in an environment that is conducive for them.

Are there any disadvantages of taking part in this project?
There are no disadvantages of this research project.

Do you have to take part in this project?
No, your participation in this project is entirely voluntary. You are not obliged to take part, you have been approached as you might be interested in taking part, this does not mean you have to. Similarly, if you do agree to participate, you are free to withdraw at any time during the project if you change your mind.

What happens now?
If you are interested in taking part in this project, please complete the attached consent form and return it to me. I will contact you so that we can arrange to meet at a time that is convenient for you. If you decide you would rather not participate in this project you do need not return the consent form to me.

If you have any questions about the Information Sheet, please email me at alishaesmail@iis.ac.uk

It is up to you to decide whether to take part or not; choosing not to take part will not disadvantage you in any way. If you do decide to take part, you are still free to withdraw at any time and without giving a reason.

All data will be collected and stored in accordance with the Data Protection Act 1998.

Thank you for taking the time to read this Information Sheet.

The Institute of Ismaili Studies

Informed Consent Form – Student Participants
STEP MTeach Research
Project Title: Sitting Comfortably in an RE classroom
Researcher's Name: Miss. Alisha Esmail
Please complete this form after you have read the Information Sheet.
Thank you for your interest in taking part in this research. Before you agree to take part, the person organising the research must explain the project to you.

If you have any questions about the Information Sheet or explanation already given to you, please reach out to me in person or at alishaesmail@iis.ac.uk.

Student Participant's Statement:
I agree that:

- I have read the notes written above and the Information Sheet and understand what the project involves.
- The research project has been explained to me and I agree to take part.
- I understand that I may be asked to participate in interviews and/or focus groups.
- I understand that I may be asked to complete questionnaires.
- I understand that I may be observed in the classroom.
- I understand that I may be asked to share activity sheets, journals, etc.
- I understand my participation may be audio/video recorded.
- I consent to the use of all of the above material as part of the project.
- I understand that this information will be strictly confidential.
- Confidentiality and anonymity will be maintained.
- I understand that if I decide at any time that I no longer wish to take part in this project, I can notify the researcher and withdraw immediately.
- I agree to the processing of my personal information for the purposes of this research project.

Student Participant's Name:
Signature:
Date:

The Institute of Ismaili Studies

Informed Consent Form – Parent/Guardian of Student Participants
STEP MTeach Research
Project Title: Sitting Comfortably in an RE classroom
Researcher's Name: Miss. Alisha Esmail
Please complete this form after you have read the Information Sheet.
Thank you for your interest in this research. Before you agree for your child to take part, the person organising the research must explain the project to you.

If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher.

Parent/Guardian of Student Participant's Statement
I agree that:

- I have read the notes written above and the Information Sheet, and understand what the project involves.
- The research project named above has been explained to me to my satisfaction and I agree for my child to take part.
- I understand that my child may be asked to participate in interviews, focus groups, complete questionnaires, and/or be observed in educational settings.
- I understand that my child may be asked to share educational material, e.g., activity sheets, journals, etc.
- I understand that my child's participation may be audio/video recorded.
- I consent to use of all of the above material as part of the project.

- I understand that such information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1998.
- Confidentiality and anonymity will be maintained.
- I understand that if I decide at any time that I no longer wish my child to take part in this project, I can notify the researcher and withdraw immediately.
- I consent to the processing of my child's personal information for the purposes of this research study.

Parent's/Guardian's   **Name:**

Child's   **Name:**

Parent's/Guardian's Signature: Date:

The Institute of Ismaili Studies   Institute of Education UCL

Informed Consent Form – Adult Participants
STEP MTeach Research
Project Title: Sitting Comfortably in an RE classroom
Researcher's Name: Miss. Alisha Esmail
Please complete this form after you have read the Information Sheet.
Thank you for your interest in taking part in this research. Before you agree to take part, the person organising the research must explain the project to you.
If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher.

Adult Participant's Statement
I agree that:

- I have read the notes written above and the Information Sheet and understand what the project involves.
- The research project named above has been explained to me to my satisfaction and I agree to take part.
- I understand that I may be asked to participate in interviews, focus groups, complete questionnaires and/or be observed in educational settings.
- I understand that I may be asked to share educational material, e.g., lesson plans, reflections, etc.
- I understand my participation may be audio/video recorded.
- I consent to use of all of the above material as part of the project.
- I understand that such information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1998.
- Confidentiality and anonymity will be maintained.

- I understand that if I decide at any time that I no longer wish to take part in this project, I can notify the researcher and withdraw immediately.
- I consent to the processing of my personal information for the purposes of this research study.

Adult Participant's Name:
Adult Participant's Signature:
Date

Appendix C:
Student Diary Entries for Week 1 – Week 6
Diary Entry 1:

What worked well in your group work? What could have been better next time?

How did you feel about the seating arrangement in class today? (+ and -)

Diary entry 2:

1. **Rate the seating arrangement of the class today** (*colour the face that best describes how you felt about the seating arrangement*)

   Explain:

Overall arrangement	*Pair work*	*Group work*	*U-shaped*
☹ 😐 😊	😊 😐 ☹	😊 😐 ☹	☹ 😐 😊

2. **Have you ever sat in a classroom with this kind of seating arrangement?** (*Circle the correct answer*)
   a. **Yes**   b. No

3. **How did this seating arrangement help you learn/not learn?**
   _____
   _____

4. **Would you recommend seating on yoga mats again? Yes/No? Why?**

_____
_____
_____

5. **What did you like the most/least about class today?**

_____
_____
_____
_____

Diary Entry 3:

Today's Seating arrangement
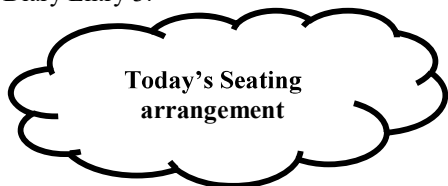
Explain:

Explain:

Refreshers: Pair work, whole class collaboration, cocktail conversation, fill in the blanks, narrative writing…

Diary entry 4:

1. Rate your participation in class today (0 = No participation and 10 = Excellent Participation)

/10

2. Rate the overall seating arrangement in class today (0 = disliked and 10 = most liked)

/10

3. Rate how comfortable your seating was in class today (0 = not comfortable and 10 = most comfortable)

/10

4. What did you like the most/least about class today?

5. What other factors may have led to your comfort or discomfort in class today?

1. Rate the seating arrangement of class today (0 = least comfortable & 10 = most comfortable)

2. Was the seating arrangement suitable for the learning outcome of the class? (Yes or No? Explain)

3. Was this seating arrangement suitable for collaborative learning? (Yes or No? Explain)

ABC

Draw your ideal classroom in the space below (How do you learn best)

Diary entry 5:

In your opinion, how can our class collaborate better?

Explain:_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Rate the seating arrangement of the class today

(0 = least comfortable and 10 = most comfortable)

____/10

Explain:_____
_____
_____
_____
_____
_____

Diary entry 6:

Appendix D:
Critical Friend Template:

Critical Friend:

Date:

Appendix E:
Student Appreciation of Seating Arrangements (Approximately three months after Research):
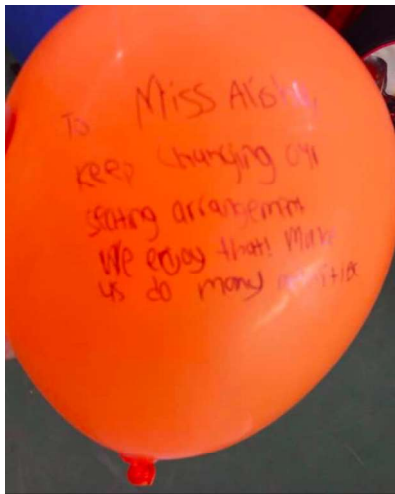
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The Design of Instructional Strategy in Developing the Model of Learning Materials in the Open Distance Learning System

Asnah Said, Marisa

Abstract—This article discusses the design of the functions of instructional strategies to produce learning material models: Steps of Systems Approach Model of Educational Research and Development (Gall, Joyce & Borg, 2007). The development of this learning material model was implemented in 2018 and will be used for Undergraduate Program students studying through the Open Distance Learning (ODL) system at the Open University. Learning materials are developed based on the design of instructional strategies from the results of the study. Instructional strategies are defined as instructional strategies describing the general components of instructional materials and procedures used for materials to enable student mastery of learning outcomes. Before composing the learning material model, it takes 6 steps to be able to design instructional strategies. These steps are carried out systematically and systematically in which there is also a valid learning outcome measurement tool to be used as a blueprint in developing quality and quality learning material models. Therefore, the development of learning material models is carried out in stages starting from the first step and up to the sixth step. **The First Step,** do Identify Instructional Goal, **The Second Step,** Conduct Instructional Analysis, **The Third Step,** Analyze Learners and Contexts, **The Fourth Step,** do Write Performance Objectives, **The Step Five,** do Develop Assessment Instrument, **The Sixth Step,** do Develop Instructional Strategy. The use of appropriate, systematic learning strategies is closely related to student learning outcomes. By using this Approach System model, the learning materials used by students are very targeted and attractive so that they can help students learn more actively.

Keyword—Instructional strategy, development of learning material models, built-in and remote learning systems.

I. INTRODUCTION

OPEN University (UT) in conducting education uses the Open Distance Learning (ODL) system. One type of learning given to students is using print media, as the main media. Some considerations, print media is the main media, because this print media is easier to develop and more flexible, economically, the cost is also cheaper. Although this print media also has several weaknesses including less interactive and highly dependent on words and are very abstract. According to Pannen (2001), ODL learning materials are lecture materials or lectures that are systematically arranged used by lecturers and students in the lecture/tutorial process. Learning materials have a systematic structure and sequence, explain the instructional objectives to be achieved, motivate students to learn, anticipate the difficulties of student learning

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in the form of providing guidance for students to study the material, provide training for students, provide summaries, and are generally oriented on students individually (*learned oriented*). Usually, ODL learning materials are independent, meaning they can be studied independently by students because they are systematic and complete. Helps students learn without having to have other lecturers or students. Make students able to study anytime and anywhere. Make students able to learn at their own pace, and can increase the potential of students to become independent students.

Printed learning material for ODL is designed based on the assumption that students have a high degree of heterogeneity between one another. Therefore, the development of printed learning materials requires high creativity to create something else, unique that requires knowledge and various learning activities or learning experiences that are developed in accordance with the availability of materials/materials around their environment. Material for learning materials must be structured systematically so that it can be used in learning interaction activities between lecturers and students. According to the results of a review of the 2016 ICDE TEAM, said:

1. Printed learning materials that have been used by UT are very boring, full of text, and lack illustrations/images, and the minimum support for learning media.
2. The revision of printed learning material carried out by UT took too long. After 7 years of use has only been revised, this condition has caused the content of printed learning materials to be out of date.
3. It is rare to monitor and evaluate the use of expert review results, including the subject of the research method being developed.

Therefore, based on the conditions and challenges described above, the printed learning material produced by UT for students in terms of content and design of learning must be developed based on concepts that have been recognized by ODL experts. One concept of developing learning materials for Open Distance Learning systems uses a model with the basic concept of "*Instructional Design for Distance Learning*". According to this concept printed learning materials are systematically developed, which pay attention to the right principles and procedures. It was built by principle-learning and instructional design that is specifically used for ODL learning. This concept creates as if there is an atmosphere of direct (dialogue *interactive)* between students and developers of printed learning materials. According to

Prastati, Trini (2016), the new generation printed learning material model must pay attention to student characteristics. Characteristics referred to in the development of printed learning materials are: *Self-instructional, Communication, Interactive,* and the resulting learning materials must be equipped with multimedia.

In line with the concept, Homberg (1983), said, in writing printed learning materials for ODL students, they must pay attention to the principle of "*guided didactic conversation" so* that the separation between learning activities and learning activities which creates a psychological distance and communication in the learning process can be minimized with the principle - the principles that exist in this "*guided didactic conversation".*

In the era of globalization, information technology and science are developing very rapidly and rapidly. Various types of learning innovations are carried out by education providers, and organizers always strive to solve problems and find the best solutions, to meet the needs of students who suit their needs. Realizing the importance of printed learning materials for ODL, then there must be continuous efforts to improve the quality of the content and material of learning materials prepared for students. Because in the ODL system, the main key to the success of students in learning activities is printed learning materials used by students. Based on the description and conditions regarding UT printed learning materials as the main print media used in the learning process, UT always strives continuously to improve the quality of printed learning materials used by students. UT always tries to find a variety of thought patterns and looks for the best alternatives to improve the quality of printed learning materials in the ODL system. Because UT as a College has an obligation to develop printed learning materials in the ODL system. UT must be able to use printed learning material models that are recognized by experts on ODL systems that are of international standard. ODL managers and practitioners must be responsive and adapt to this situation, ready to accept, willing to learn and experiment with new technology, and willing to improve their skills in accordance with the times.

II. Literature Review

1. Concept of Open Distance Learning (ODL)

The concept of Open Distance Learning (ODL) is basically a goal or aspiration regarding education system policy. The concept of education emphasizes the importance of system flexibility to minimize the constraints of place, time and aspects caused by student characteristics such as economic conditions (Bates, 1995). The ODL system provides a variety of learning opportunities that aim to provide students with access to knowledge and skills that are not obtained through other opportunities and provide opportunities for students to control their learning processes. The ODL system provides an opportunity for anyone to learn, regardless of age, distance and time. As what said Moore, (1973) the ODL system is a learning method in which the learning process occurs separately from the learning process so that communication

between learning staff and students must be facilitated through printed materials, electronic media, and other media. The learning system at UT is carried out with the ODL system, which is different from the learning system as usual. This system gives anyone the opportunity to learn, without knowing the limits of age, distance, and time. UT students are not required to be present in the class to attend the face-to-face learning process and follow strict lesson schedules and regulations such as in the regular class. In order for students to learn independently, printed learning materials have been prepared in advance by the organizers, planned and developed according to the needs of students and still guided by the standard curriculum. For the implementation of the learning process, various diverse Information and Communication Technology-based learning media have been prepared for students. In addition, UT provides services for students who need learning assistance through face-to-face tutorials.

ODL has grown and developed for more than a century (Schlosser & Simonson, 2006), Moore and Kearsley (1996) and Peters (2008) suggest that ODL has evolved through three stages of generation. *First Generation Stage:* starting with an independent learning system that uses the main media for printed learning materials known as *self-instructional texts,* combined with written communication between instructors and students, through postal services. *Second Generation Stage,* around the 1970s, together with the establishment of Open University *(UKOU)* in the UK, the term *Open Distance Learning* became more popular. According to Taylor, in Belawati (1999) characterized by the use of broadcast and recording technology (especially with media distribution through television, radio, and audio/video tapes), computers such as *computer-mediated learning and computer-assisted learning,* and teleconferencing *(audio/video teleconferencing*). Furthermore, followed by the emergence of the Open University in early 1985, then in 1990, it developed rapidly when UT began the learning process using information and communication technology (ICT). *Third Generation Stage,* according to Taylor, in Belawati (1999), starting in early 1999 it was characterized by the use of very extensive internet and intranet networks, especially for the sake of interaction through what is called *computer-mediated communication,* when this came the third generation emerged.

But even so, according to Brigham, in Belawati (1999), the use of increasingly sophisticated technology does not just leave the use of printed learning materials that still dominate the method of delivering the main learning material in many ODL institutions. On the other hand, Belawati, (1999), said that another high technology is generally used as a tool to communicate and provide learning assistance services to students, so the learning and learning process becomes more interactive.

Therefore, it can be concluded that in the application of learning innovations the most important thing is to use interactive multimedia, because this interactive multimedia can influence student behavior, and serves as a source of information needed by students. Especially those who use independent learning material which is one of the concepts in

the ODL system.

2. Concept of Open Distance Learning in Developing and Developed Countries.

Open Distance Learning (ODL) has been widely implemented in various countries such as: Canada, the United States, Britain, Australia, Germany, the Netherlands, Hong Kong, Japan, the Philippines, the People's Republic of China, Thailand, Burma, Indonesia, Korea, Papua New Guinea, Malaysia, Fiji, Bhutan, South Africa, Hong Kong, Nepal, Afghanistan, Bangladesh, India, the Netherlands, Sri Lanka, New Zealand. Understanding and views from various sources, such as scholars and clouds, from developed and developing countries to ODL vary so that their quality and abilities are also different. In general, these countries have something in common because they use the ODL system in their country. According to Smith (1986), there are three factors that encourage the use of ODL, namely:

First, because of the rapid growth of communication technology, such as radio, television, telephone, and computers. Since 1960, computers have attracted a lot of interest from various parties to be used as educational facilities. Since the year 2000 began to develop again the internet, which is more sophisticated than computers.

Secondly, the development of rapid science for adults and children, conditions, learning motivation, interests, and workplace needs felt the need to look for a different pattern of education than education in general.

Third, the rapid development of the population has an impact on the cost of education, and the desire to improve the quality of education.

On the other hand, people feel they have the right to get an education, even though they have problems with distance, time and costs. Some countries also have different levels of education offered, varying depending on needs. ODL is offered for formal and non-formal education. The level of education offered is from the level of elementary school, secondary school to higher education At the tertiary level, ODL is applied to educate competent and qualified graduates in various degree and non-degree programs, academic and professional pathways, starting from the certificate, diploma, bachelor, master and doctoral level (Suparman & Zuhairi 2004). Experience from various countries shows that there is a diversity of applications in ODL. Differences in geographic and demographic contexts, national community needs, different population densities and technological developments in each country. According to Suparman, and Zuhairi (2004), socio-economic, political, technological developments and the impact of globalization have had a wide influence on the implementation of ODL at the higher education level. ODL is seen as an effective method for increasing access to and participation in higher education and reaching out to anyone from any social and economic group to take part in education programs from their respective locations. ODL enables the realization of universal access to higher education which is one indicator of the progress of a nation. ODL has grown rapidly in the last three decades. Therefore, nowadays ODL has a strong theory and foundation. There are a number of main things that are constantly being discussed by experts in the field of ODL, regarding the concept of developing countries, as well as developed countries. This situation makes ODL more dynamic and growing. According to Suparman & Zuhairi (2004), the main issues discussed are related to the quality of the opposite quantity, opportunity and equity, relevance, face-to-face meetings of independent learning, communication technology used, alternatives to complementary, and ODL as fields of study and profession.

From the description above, it can be concluded that ODL is an alternative for developing countries such as Indonesia. The aim of implementing ODL is to increase access, participation and equal distribution of education for all citizens. Providing opportunities to anyone, providing educational services to many people. ODL overcomes obstacles and obstacles physically, time, cost, age, family and geography. There are six components that are characteristic of ODL, which are found in both developed and developing countries. The six components are in line with the opinion of Keegan (1986), which states the characteristics of ODL are as follows:

a. Clearly, ODL shows that teachers and students are separated in distance, and do not meet face to face.

b. ODL is different from informal education, self-taught, or self-study, or what distinguishes it from personal studies because ODL requires the influence of educational organizations or educational institutions that manage the education process.

c. The multimedia approach in ODL is a very important primary choice. The use of media functions for two things, namely: as an intermediary that brings together teachers and students, and brings the contents of the lesson from the instructor to students.

d. In general, ODL uses two-way communication, this two-way communication benefits students, and students can benefit from this two-way communication and take the initiative for dialogue. Two-way communication provides benefits for students and managers for interactive dialogue.

e. Although the system is remote, ODL still requires face-to-face meetings in limited time, because face-to-face discussion between students and managers is still needed. If face-to-face needs are not met, they can be replaced with media use.

f. In implementing ODL that operates as an industry, there are long and complex activities for various things, such as producing printed and non-printed learning materials, and developing learning media.

3. The Concept of Open Distance Learning in Indonesia Especially Open University (UT)

Indonesia is an archipelago consisting of 13,000 thousand islands, this condition has a close relationship with human activities, especially in terms of communication and transportation. Indonesia is a vast country that has the four largest population in the world. This factor causes low

socioeconomic capacity, uneven population distribution, and limited government finances. Another consideration in the problem of education is the difficulty of investing in the addition of learning staff and lecture rooms because it will take too long. As stated by the Minister of National Education (2007), the opening of UT was based on two major issues that developed in Indonesia in the 1980s, namely the low quality of education and the low capacity of tertiary institutions. Improving the quality of education is carried out, among others, through improving the quality of learning staff without having to leave their duties. Education with an ODL system allows one of the right solutions. Likewise, the problem with the increase in capacity of tertiary institutions is very small when compared to high school graduates. On the other hand, Setiyadi (2007) said, since the beginning, UT was established with three main objectives, namely: **First,** to provide training/education to teachers so that they could continue their education without having to leave their routine duties as teachers. **Second,** to provide opportunities for public high school graduates not accommodated in face-to-face tertiary institutions, and **Thirdly,** to provide opportunities to the wider community who wish to continue their education at higher education levels but cannot attend face-to-face education because they work or something other. Specifically, for Indonesia, which is a developing country, and consists of many islands, the ODL system is needed and needed by many people.

Finally, to overcome these problems, the government then decided to establish an open university and could serve students everywhere. The education system adopted by the tertiary institution is Open Distance Learning (ODL) and the University which is entrusted to process it is Open University (UT) which was established by the Indonesian government on September 4, 1985. UT is the 45th State University in Indonesia that organizes Open Distance Learning systems far shortened to the ODL system. Specifically, for Indonesia, because it is a developing country, and a country consisting of many islands, the ODL system is very much needed and needed by many people. This can be proven from the 2016 Chancellor Report, which said, from the year UT was established in 1984 to 2016, UT had produced 1,609,843 students from various majors, and degrees.

III. RESEARCH METHODS AND APPROACHES

This educational research uses the Research & Development (method *R & D),* this research is often also called research-based development *(Research-Based Development).* In other words, this R & D research is a process-oriented towards development by validating the model or design of educational programs through a research approach, so that it becomes a new product that is scientific in nature to meet the needs in accordance with the times. The model developed in this study is a physical model of learning materials for the new generation of UT, namely: Print Learning Materials consisting of 9 Modules in the Research Methods course. The learning material developed was to replace the learning materials that had been used by students so far. Suparman (2016) said, R & D in education is a scientific process that identifies needs, develops or creates educational products and validates these products so that they become new scientific products to meet needs. The new product, developed through systematic scientific procedures and field trials so as to meet the quality criteria in terms of effectiveness, and efficiency.

Furthermore, the development of learning material models conducted in this study uses a combination of Major Steps in The R & D Cycle (Borg & Gall, 1983) with the *Steps of System Approach Model of Educational Research and Development* (Gall, Joyce & Borg, 2007.ed 8). Gall, Joyce & Borg, named the model: *Steps of Systems Approach Model of Educational Research and Development* (Gall, Joyce & Borg, 2007). The steps for developing learning materials for subject research methods carried out in this study are as follows:

Picture 1. Developing the Model of Learning Materials in the Open Distance Learning (ODL) system (Gall, Joyce & Borg, 2007)

First Phase Activity: Research and Information Collection (Research and Information Collecting).

The activity of conducting this preliminary research is by researching and collecting information, about the learning materials of the research methods that have been carried out related to 1. Preparation of learning plans 2. Implementation of learning. 3. Evaluation of learning outcomes and 4. Implementation of lecturer assignments. Next, carry out literature/library studies, collect supporting materials, which are related to the methodology of problem-based research concept. Conduct a needs analysis, and describe the analysis

of findings. Furthermore, the findings from the pre-survey results or preliminary study data and needs analysis are analyzed to get an overview of learning materials as a basis for the development of learning material models that will be developed by researchers in order to improve student learning outcomes.

Second Phase Activity: Identifying General Instructional Objectives.

Writing General Instructional Objectives, according to Suparman (2014), the purpose of writing TIU is to achieve competencies that have never been studied or not done well by students. The expected competency is general or very high. It is a learning outcome that is expected to be mastered by students after completing instructional activities. These learning outcomes are called General Instructional Objectives.

Third Phase Activity: Conducting Instructional Analysis Instructional

The analysis is a procedure used to determine the skills and knowledge that are relevant and needed by students to achieve competency or learning objectives.

Fourth Phase Activity: Identifying Early Behavior and Characteristics of Students

The fourth phase of the activity is to determine the competencies mastered by students before taking the research method course. Knowledge of the initial characteristics of students is very necessary for determining instructional strategies, especially instructional methods, media and tools, and learning assistance. The initial characterization is characteristic of students before participating in the learning process

Fifth Stage Activity: Writing Special Instructional Objectives Specific Instructional

Objectives are the objectives to be achieved from learning a subject or sub-subject that is specific and operational in nature. In general, learning outcomes are always associated with specific Instructional Objectives that have been determined. Specific Instructional Objectives are details of the General Instructional Objective

.Sixth Stage Activity: Developing Learning Outcomes Assessment Tool

Suparman (2014), states, that the learning outcome assessment tool that should be compiled is a tool that measures the level of achievement of students in the competencies contained in instructional objectives. This means learning design can compile learning outcome assessment tools that will be used to measure the success of students in accordance with the competencies that have been determined in ICT.

Seventh Stage Activity: Develop Instructional Strategies.

Learning strategies are closely related to how to deliver subject matter so students can learn. The methods chosen must be planned systematically, to achieve maximum learning outcomes. The approach in managing content and instructional

processes comprehensively to achieve one or a group of instructional goals.

IV. RESEARCH RESULTS AND DISCUSSION

The results of the research discussed below are the results of research that uses R & D research methods that are suitable for the research objectives to be achieved. The results of the final research in accordance with the research objectives that have been determined in advance are as follows:

1. Describe the conditions of student learning and gathering information that uses UT print learning materials so far.
2. Identifying General Instructional Objectives for printed learning materials that are in accordance with the latest characteristics of UT students and at the same time can be used as print learning materials for students.
3. Conducting Instructional Analysis for UT print learning materials that are in accordance with the latest characteristics of UT students and at the same time can be used as print learning materials for students.
4. Identifying Behavior and Characteristics Early students for UT print learning materials that can overcome UT learning problems so far that are in accordance with the latest characteristics of UT students and at the same time can be used to become printed learning materials for students.
5. Writing Specific Instructional Objectives for UT print learning materials that are in accordance with the latest characteristics of UT students and at the same time can be used as print learning materials for students.
6. Arranging student Learning Outcomes Assessment Tools that will be used to measure student success in accordance with the competencies specified in the Instructional Objectives. Special.
7. Arrange the *blueprint* of Instructional Strategies for UT print learning materials that are in accordance with the latest characteristics of UT students and at the same time can be used to become print learning materials for students.

V. CONCLUSIONS AND SUGGESTIONS

The development of the learning material models used in this study are: Combination between Major Steps in The R & D Cycle (Borg & Gall, 1983) with the *Steps of System Approach Model of Educational Research and Development* (Gall, Joyce & Borg, 2007.ed 8). Furthermore, Gall, Joyce & Borg, gave the name of the model: *Steps of Systems Approach Model of Educational Research and Development* (Gall, Joyce & Borg, 2007). The final product of R & D in the second year (2018) in this study is Conventional (*Print Learning Material Model Print Module1s / d Learning Materials Module 9).* The conventional learning process is students and tutors who still not have online learning habits and have absolutely no access to the internet so that they are totally dependent on learning with printed learning materials that use simple media, and carrying out face-to-face tutorials. Each approach requires managing different learning, but all must ensure that the

effectiveness is the same as long as the learning interactions occur with the same high quality and frequency.

Suggestion

Learning assistance that uses printed learning materials in the ODL system is one of the learning innovations given to students, not is something that is difficult to implement, if the users, especially students find a lot of conveniences and enjoy benefits that cannot be mentioned one by one. Learning assistance that uses printed learning materials must first be designed by a TEAM consisting of Material Experts and Learning Media Experts, before being used by students. The goal is that this printed learning material can be designed to become a Learning Package that can be used independently by students. Because the design of learning is designed, through a learning process that has certain standards. The procedure for making it is planned systematically and correctly, from the selection of learning models, learning strategies, learning design, and learning methods to the evaluation of learning.

Therefore, educators need to make efforts to improve the quality of learning outcomes and learning processes through the help of printed learning materials that are used by students for the implementation of the ODL system. Quality conditions are a very big challenge for educators both for the present and the future. Educational Experts are constantly looking for various thought patterns and looking for the best alternatives to improve the quality of the learning process used in the ODL system. Therefore, it is time for UT to develop print learning materials for students based on the concept of R & D research as it is today.

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Six Levels of Knowledge in Curriculum Mapping

Tarek Sharaf

Abstract—The curriculum mapping model based on Dr. Heidi Hayes Jacobs' work (1997, 2004, 2006, 2008, 2009, 2010) synthesizes aspects of traditional and contemporary models that focus on recognizing and enhancing learning, assessing, and teaching. Dr. Jacobs embraced the earlier mapping work of Fenwick English by articulating types of curriculum maps, as well as the need for vertical and horizontal alignment, cyclic reviews, and ongoing curricular dialogues. Jacobs (2004) states that: "curriculum maps have the potential to become the hub for making decisions about teaching and learning. Focusing the barrage of initiatives and demands on schools into a central database that can be accessed from anywhere through the Internet can provide relief…Mapping becomes an integrating force to address not only curriculum issues but also programmatic ones." (p.126).

Keywords—Curriculum, mapping, teachers, Students.

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The Influence of Cognitive Style and Independent Learning on Students' Learning Outcomes in Mechanics Course

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Abstract—Students of Physics Education Department, Faculty of Teacher Training and Education, in Indonesia Universitas terbukaare expected to be independent in learning all the modules given. They are the instructional materials specifically designed for the Physics Education Department. Therefore this research study was conducted to identify the effect of the students' learning styles and level of independent learning on the students' learning outcomes in Mechanics course. Data collection was conducted at the Distance Learning Program Unit in Purwokerto as a unit with quite a lot of students taking the Physics Education course in all semesters and numbers of face-to-face tutorials held as well as experiments in the laboratory. They were all used as the subjects of this research. The data obtained were later analyzed using SPSS for Windows 2.0 software. The results showed a significant correlational value at $0.000 < \alpha = 5\%$ between the students cognitive learning styles and their learning outcomes. It could be said that the students' cognitive learning styles significantly affected the students' learning outcomes in Mechanics course. However, the learning independence variable had no significant correlation with the students' learning outcomes; the significance level of the dependent cognitive learning style variable was $0.007 < \alpha = 5\%$. Meanwhile, the interaction between cognitive learning style and independent learning was shown to be influencing the students' learning outcomes in Mechanics course.

Keywords—Cognitive learning, dependent, independent learning, learning outcomes.

I. INTRODUCTION

INDEPENDENT learning is an activity of learning independently which requires students to learn on their own proposal or initiative. Independent learning can be completed individually or in groups; either study, tutorial, discussion groups, or outside the tutorial groups. The definition of independent learning according to Hiemstra (1994: 1) is as follows: (1) Every individual tries to increase their responsibilities in making decisions; (2) Independent learning is seen as a train that already exists in every person and learning situation; (3) Independent learning does not mean separating from others; (4) With independent learning, students can transfer their learning outcomes in the form of knowledge and skills in other situations; (5) Students who conduct independent learning can include various resources and activities, such as: independent reading and group learning activities, exercises, online chats, and correspondence activities; (6) The effective role of teacher in independent

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learning situations is still needed such as in having dialogues with the students, finding options for learning resources, providing result evaluations and creative ideas; (7) Some educational institutions are currently developing independent learning activities in order to become more open programs as individual learning alternatives and other innovative programs.

II. INDEPENDENT LEARNING ACTIVITIES

According to Haris Mudjiman (2009: 20-21) various activities need to be accommodated in independent learning trainings which are indicated by the existence of (1) competencies which are set by the students themselves in attempt to achieve the final learning objectives determined by the training program for each of the subjects or courses; (2) opportunities for learning processes that are independently set by the students; (3) adequate learning inputs which are searched and set by the students themselves – the activities can be undergone by the students with or without any support from the teacher; (4) personal self-evaluations by the students themselves; (5) personal reflection activities on the learning processes that have been completed by the students; (6) efforts to grow student learning motivations; and (7) active learning behaviors. From the above explanations about the definition of independent learning as the key term, it can be concluded that independent learning includes the student behaviors in realizing their personal intentions and desires in realities by not being dependent on others. In this case, the students are expected to be able to complete their own learning experiences or self-studies, identify effective learning strategies for themselves, and complete all the assigned learning tasks well and conduct learning activities independently.

Hilgard & Blower (in Hamalik, 2004: 45) remark that learning is a change in behavior through actions, practices, and experiences. In learning, there are some basic components involved: a) learning enables change to take place (such as intended behavior changes, both actual and potential); b) changes produces new skills; c) changes occur due to the presence of efforts (Suryabrata, 2001: 232). According to Cronbach in his book titled Educational Psychology Suryabrata (2001: 231) remarks that "learning is a change in organisms because of experiences that can affect the behavior of the organisms". In the same vein, Syah (2006: 65) states that changes that occur because of new experiences can be said as learning results if they affect the organisms. In sum, from the experts' opinions above, it can be concluded that learning is a process which is experienced by an individual

that makes him move from the state of not-knowing to the state of knowing and this involves the psychological elements of the individual.

Cognitive is a learning condition which is one of the many factors to be considered in designing lesson plans. Knowledge of cognitive style is needed in designing or modifying materials, objectives, and learning methods. It is expected that maximum students' learning outcomes will increase with the presence of interactions between the students' cognitive style and instructional materials, objectives, and methods. Cognitive style refers to an individual's cognitive related to understanding, knowledge, perception, thinking, imagination, and problem solving. Cognitive style shows variations between individuals in their efforts to approach certain tasks, but the variations do not necessarily represent any level of intelligence or ability. As behavioral characteristics, similar characteristics of two individuals with the same cognitive styles may have different abilities; moreover if the individuals have different cognitive styles then it is very likely that they also have more highly different abilities. Every individual has different cognitive styles in processing information. Therefore, it can be said that cognitive style is a step taken by an individual in processing information through responsive strategies on a given task. Regarding this, Woolfolk (1993) shows that ways in understanding cognitive styles there are different ways to see, recognize, and organize information. Each individual will select their own way of processing and organizing their thought as a response to the stimulus given by the environment. There are individuals who are quick in giving response, but there are also those who are slow. These ways of responding are also related to the individual's behaviors and qualities; one's cognitive style represents the individual's variation in giving attention, processing information, memorizing, and thinking which arises and making a difference between cognition and personality (Anita E. Woolfolk, 1993: 128). Later, patterns are formed by the way individuals process information, which tends to be stable even though it is not always unchanged.

Furthermore, Woolfolk (1993) explains that there are many variations of cognitive styles which that attract the attention of many educators and they distinguish types of cognitive styles based on dimensional aspects. Differentiation which is widely chosen is based on psychological aspects, namely field independence (FI) and field dependence (FD). The position of cognitive style in a learning process cannot be neglected. As one of the students' characteristics, the position of cognitive style in a learning process is important to be concerned by teachers or lesson planners since lesson plans which are designed and regulated by taking cognitive style factor into consideration means providing instructional learning that is incompliance with the characteristics and potentials of the students.

The role of cognitive style in a learning process is as suggested by educational experts with regard to cognitive style dimension explained in Woolfolk (1993) that implementation in learning determines the success of learning. A student who has an FD cognitive style, which leads to a global perception

style, feels a heavy burden and difficult in processing information but relatively easy to perceive if the information is manipulated according to the corresponding context. Meanwhile, an individual who has a psychological difference by having an FI cognitive style, which leads to articulation, will have an analytical perception by separating stimuli from the context, but a low level of perception when there is a change in context. However, psychological differences can be changed through exposure of different situations. Individuals having the FI cognitive style category usually use internal factors as the direction of processing information. Individual with FI prefer to complete tasks unsystematically and fell that it is more efficient to work alone that with partners.

As students of Indonesia Open University, the individuals have to learn independently using various resources available including the internet and also must be strong, resilient, and enthusiastic during their studies at the university. Thus, the research problem of this study is formulated as "How do cognitive style and independent learning factors influence the students' learning outcomes?". The question is further explained by answering several research questions, i.e. (1) How does cognitive learning style influence the students' learning outcomes in Mechanics course?; (2) How does independent learning influence the students' learning outcomes in Mechanics course?; (3) How do cognitive learning style and independent learning altogether influence the students' learning outcomes in Mechanics course?

III. LITERATURE REVIEW

Independent learning can be completed individually or in groups, either study or tutorial groups. Indonesia Universitas terbukaprovides instructional materials which are designed to support independent learning activities. Besides using the instructional materials provided by the university, the students are also able to take initiatives of using other reading materials in libraries, follow tutorials, either face-to-face or using other media such as the internet, radio, and television. They can also make use of other learning resources, such as computer assisted instructional materials as well as audio/video programs. Independent learning in many domains is determined by the ability of learning effectively. Learning ability depends on the speed in reading and ability of understanding contents of reading materials. In order to be able to have a great degree of effective independent learning, students of the Physics Education in Indonesian Universitas Terbuka are required to have self-discipline , initiative, and strong learning motivation. The students are also required to be able to manage their time efficiently so that they can study regularly based on a self-determined study schedule. Therefore, in order that the students can obtain optimal results, the students of Physics Education Department have to have the ability and skills of independent learning.

Learning motivation is a desire found in an individual learner and stimulates the individual to carry out independent learning activities. The characteristics of motivation according to Stillwell in Harliana (1998) include: (a) responsibility – those who have a high learning motivation feel responsible on

the performed tasks and will not leave the duties before successfully completing them, (b) diligence on performing the tasks – concentrating on the task completion and not easily giving up, (c) time orientation for the task completion – trying to always completed each as quickly and efficiently as possible, (d) setting realistic goals – setting realistic goals according to their abilities and concentrating on each step to achieve the goals and evaluate any progresses that have been achieved.

Aspects related to the autonomy of the learning carried out by the students consist of planning, monitoring, as well as evaluation of learning. Planning activities include (a) managing time effectively (making learning schedules, compiling study calendars for writing or marking important dates in the study period such as task submission dates of homework assignments or projects, preparing the handbook materials, stationeries, and other learning equipments), (b) determining priorities and self-management activities (identifying which activities are to be prioritized and setting time when to complete them). Next, monitoring activities in learning employ Cooperative Learning model, namely (a) being active in conducting group discussions, (b) willing to express opinions during discussions, (c) being active in asking questions when encountering difficulties either with friends or tutors, (d) making notes if necessary, (e) continuing to carry out learning activities although the tutors are absent. Meanwhile, learning evaluation includes (a) paying attention to feedbacks from the completed tasks to identify the mistakes, (b) redoing the questions or tests at home, and (c) trying to correct the mistakes. There are several factors in the context of learning which can affect students' experiences of being independent, among others, such as structure and nature of the tasks. Structure and nature of the tasks in the learning context are manifested in many ways, such as the students learn using Cooperative Learning framework and doing various group discussions.

Based on the above explanations, it can be concluded that students' independent learning is a learning form which provides opportunities for students to determine learning goals, study planning, learning resources, evaluation, and activities according to their own needs.

IV. COGNITIVE STYLE

One of the characteristics of students is cognitive style. Cognitive style is the typical way how students learn, encompassing their way of receiving and processing information, attitude towards information, and habits related to the learning environment (James W. Keefe, 1987: 3-4). Cognitive style is one learning condition which is one of the considerations in designing a lesson (Bruce Joyce, 1992: 241). Knowledge of cognitive style is required to design or modify learning materials, objectives, and methods. It is expected that with the interactions among cognitive style, learning objectives, materials, and methods, the students' learning outcomes can be as optimal as possible. This is in accordance with the opinion proposed by some experts who state that certain types of learning strategies require certain learning styles. As a characteristic of human behaviors, cognitive style is on the trajectory of ability and personality manifested in several activities and media. Cognitive style shows variations between individuals in their approach to a particular task, but that variation does not indicate a certain level of intelligence or ability. The characteristics of individuals with the same cognitive style do not necessarily indicate that they also have the same abilities of level of intelligence. Moreover, individuals who have different cognitive styles, the tendency for differences in abilities would also be greater. Every individual has different cognitive styles when processing information. Cognitive style is understood as a step taken by an individual in processing information through responsive strategies on the tasks received. Next, Woolfolk (1993) shows that there are different ways to see, recognize, and organize information in a cognitive style. Each individual will select their own preferred method of processing and organizing in response to the stimuli given by the environment. There are individuals who are quick to respond, but there are some other who are slow and these ways of responding are also related to personal attitudes and qualities.

Furthermore, according to Woolfolk (1993), an individual's cognitive style represents his individual variation in terms of attention, acceptance of information, memorizing, and thinking that arises which sometimes differs between cognition and personality. Cognitive style is a pattern which is formed through the way an individual processes information; it tends to be stable although it does not necessarily remain unchanged. In general, cognitive style is achieved and patterned for a long period of time as a continuum. As pointed out by Woolfolk (1993), there are variations in cognitive styles based on dimensions, namely (a) differences in psychological aspects, which consist of field independence (FI) and field dependence (FD) and (b) time understanding concepts, which consist of impulsive and reflective styles.

Styles in receiving information are more related to data reception and analysis, whereas in the style of concept formation and retention they are referred to the formulation of hypotheses, problem solving activities, and memory processes. Cognitive style is part of learning styles, and learning styles are related to (but different from) intellectual abilities. There are differences between ability and style. Ability refers to the content of cognition which states what kind of information is processed, how, and in what form, while style refers to the cognitive process which states that the content of the information is processed.

The position of cognitive style in the learning process cannot be ignored. As one of the students' characteristics, the position of cognitive style in the learning process is important to be noted by the tutors and learning designers because lesson plans which are proposed by considering cognitive style means presenting instructional materials that address the students' characteristics and potentials. With such a learning design of lesson plan, the learning atmosphere will be well-created because learning does not seem to infringe the students' rights. In addition, the learning process is adjusted with the students' cognitive process and development.

L.B. Resnick and A. Collins (1996: 126) suggest that the growth and activation of cognitive process is closely related to the characteristics of students' cognitive process. Thus, in improving students' cognitive process, the characteristics of each individual student need to be emphasized. In the learning design of organizing elaboration models and textbooks before the lesson plan drafts are arranged, what the teacher should do first is test the students' characteristics which is directed at testing their cognitive styles. With this testing, the teachers or learning designers can be able to identify the cognitive styles of each of the students as described above.

Theories about information processing discuss the kinds and roles of memory, including the role of short-term and long-term memory. Information stored at a short-termed memory is forgotten more quickly than that stored and processed at a long-term memory. Information stored in long-term memory will become knowledge and improve one's cognitive ability. Studies on the relationship between information processing and delivery of materials through providing visualizations as well as geometry objects and/or spatial objects in improving cognitive abilities have been extendedly conducted by experts. Their research study results conclude that there were differences in variants about cognitive abilities in attempt to understanding geometry and spatial objects.

Next, what is the role of cognitive style in the learning process? Referring to the expert' views on the dimensions of cognitive style (Woolfolk, 1993), the implementation of cognitive style in learning determines the success level of learning. A student with field dependence (FD) cognitive style with a global perceptual would feel burdens that are difficult to process; he would easily perceive information if it is manipulated according to the context. An individual who has a psychological differentiation of FI, the articulation will be analytically perceived. He will be able to separate stimuli from the context, but his perception will be weak when the context changes. Nevertheless, psychological differentiations can be corrected through varied situations. Individuals in FI category usually employ internal factors as directions in processing information. The individuals would prefer to work on tasks in a non-sequential manner and individually. With this regard, cognitive style has adaptive characteristics that vary from one cultural and social situation to another. In social situations, FD individuals are generally more interested in observing the social situation frameworks, understanding other individuals' faces and feelings, being attracted to the process of delivering verbal messages with social contexts, and having a great interest in external social conditions and regarding them as feelings and behaviors. In certain social situations, individuals with FD cognitive style tend to be very kind, such as being warm, sociable, friendly, and responsive. They are always curious to know more when compared to individuals with FI cognitive style. Individuals with FI commonly feel external pressure in different social situations and respond to the situations in a cold, distant, and insensitive manner.

Based on the above explanations about cognitive styles, it can be concluded that cognitive style can be regarded as a variable in learning. In this respect, with its position, it is regarded as a variable of students' characteristics, and the existence is internal. This means that cognitive style can be understood as the capability of an individual to develop along with his intelligence development. For students, cognitive style is given and it has a certain degree of influence on their learning outcomes. In this case, students with a particular cognitive style also need certain learning strategies in attempt to obtain optimal learning outcomes.

V. Learning Outcomes

According to Maulana Agung Sedayu (2016), it was found that there was an increase in student learning activeness which was shown by an increase in the average class score from Cycle I to Cycle II at 10.75% and from Cycle II to Cycle III at 5.50%. Also, there was an increase in the students' learning outcomes represented by an increase in the students' average score from Pre-Cycle to Cycle 1 of 10.97%, from Cycle I to Cycle II at 8.67%, and from Cycle II to Cycle III by 4.13%. Whereas, according to Nikmah Sholihah (2009), in order to identify whether or not there are learning difficulties experienced by the students in understanding concepts in Physics course especially on the topic of Motion and Style using Think Model for a Physics learning remediation effort on the two topics. Next, according to Rosyid R. (2013), the implementation of Science Orientation Learning can increase the quality of interactions in learning Physics between students in the XI IPA 1 of Public Senior High School 3 in Jember and the achievement of basic competencies in Physics as indicated by three aspects of Basic Competence namely cognitive, psychomotor, and affective. The success of the Think Model was indicated by the questionnaires containing the students' responses of 65.34%, meaning that the learning using Think Model was categorized to be good for learning remediation. Next, according to Ianah (2016), the implementation of POE (Predict-Observe-Explain) learning model can increase the learning outcomes of the XI graders in Taqwiyatul Wathon Sumberejo Islamic Senior School on Motion Mechanics subject materials. This was concluded from the research study results that in the Pre-Cycle Stage the average score obtained by the students was 60 with a classical passing grade percentage of 56.7%, and in Cycle I the average score increased to 72.45 with a classical passing grade percentage of 74.2%, and in Cycle II the average score increased to 78.90 with a classical passing grade percentage of 87%. Nikmah Sholihah (2009) from Physics Education Study Program, Faculty of Science and Technology, Islamic Public University of Kalijaga in Jogjakarta conducted a learning remediation of Physics on Mechanics topic with students in Grade X as the model. It was shown that there were differences in the mastery of concepts in Physics. Meanwhile, Albert Lumbu (2015) in his research report showed that the students' learning outcomes can be increased using discussion teaching method. Using Fun Effective Active Creative learning model, the students' activities in learning as well as their learning outcomes were improved on Mechanics subject as indicated by the increased average scores of the students on Mechanics topic of discussion.

In particular, Mechanics is a course that is considered to be quite difficult to be learned independently both individually and in groups. This is because the course integrates the students' ability in Mathematics and Physics formulas which are relatively extensive. Mechanics also refers to the science which studies the movement of an object and the effect of the force produced by the movement. Mechanics subject discipline is divided into two: Static Mechanics and Dynamic Mechanics; the latter is also divided into two types, namely Kinematics and Kinetics. In various articles about the definitions, types, and examples of motion in Physics, it is explained that what is meant by motion is a change in the position of an object against a particular reference of point. This course requires a lot of time to conduct practicum to investigate the validity of a theory or law. Therefore, students need to have full concentration and focus in learning Mechanics course. When the previous Final Exam was held previously, most of the students were not aware such that most of them were failed in the course and had to retake the course in the following semester. This becomes a motive why this study focuses on Mechanics course.

VI. RESEARCH METHODS

Samples of this research were students in Physics Education who were taking Mechanics course as many as 107 students. Questionnaires were distributed to all the students participating in the tutorial in several districts under the Distance Learning Program Unit in Purwokerto. Each respondent was given two different questionnaires: one which deals with cognitive style and the other was about independent learning. And the other instrument used was the students' set of scores in Mechanics Final Exam course which was carried out at the end of the semester.

Research Design

This research employs explorative research design to investigate whether each variable contributes to the students' learning outcomes in Mechanics course. The research questions to be answered were (a) Was there any effect of the students' independent learning on their learning outcomes in Mechanics?; (b) Was there any effect of the students' cognitive style on their learning outcomes in Mechanics?; and (c) Was there any effect of the students' independent learning and cognitive learning altogether on their learning outcomes in Mechanics?

In this study, there were several steps to conduct the research. Firstly, the questionnaires which had already been answered by the students which contained information about their cognitive style and readiness to embrace independent learning were collected. Secondly, the students' Final Exam scores in Mechanics course were also collected from Indonesia Open University.

Research Instruments

To investigate the students' cognitive style, the Embedded Figures Test (EFT) developed by Witkin (1977) was used. It is a test of perceptions using numbers and images describing the outer frame reference by replacing complex images with simple images hidden behind the complex ones. The independent learning questionnaire consists of 30 questions which refer to the ability of the student's to learn independently. Both variables were analyzed with the students' scores in the Final Exam of Mechanics course. This was to identify the influence of the students' learning independence level on their cognitive style and the influence of the students' cognitive style on their learning outcomes in Mechanics course.

VII. RESULTS AND DISCUSSION

The students of Physics Education in Purwokerto who managed to join and took part in this research study as the sample were as many as 67 students. The students were those who often came to the unit for their academic needs or group discussions with their tutors of Physics who were assigned to teach in the unit. In Purwokerto, there were some tutors of different courses such as Physics, Biology, Chemistry and they were all very active. Many students came to the unit to ask questions regarding the instructional materials. Therefore, it was quite easy to gather all the 67 students to come in one occasion.

Based on the results of analysis, it was found that the students' independent learning ability did not affect the students' scores value in Mechanics course. The obtained significance level was $0.639 > \alpha = 5\%$; so that it was concluded that significantly the students' independent learning level did not have any influence on the students' learning outcomes in Mechanics course. This may be caused by the students' independent learning was not quite good enough. They had not been able to properly understand concepts in Mechanics Science and the completed practices and exercises were still limited to following the step-by-step answers or solutions to the existing questions. Otherwise, the students were still not quite confident in doing the practices without seeing the answer keys and explanations provided in the materials. The value of significance obtained for FD cognitive style variable was $0.007 < \alpha = 5\%$, meaning that FD cognitive style significantly influenced the students' learning outcomes. It was also possible to say that cognitive style is a gift from GOD that characterizes humans. Cognitive style can have a strong influence if the environment is supports the condition where the students have already got used to independent learning either individually or in groups. When the students learn independently, they can manage the time when to learn and for how long in attempt to master the Mechanics course materials. Nonetheless, when the students learn in groups, there is usually an individual considered to be very accommodating in helping the group solve the problems. Quite often, there are group members who are passive, while there are others who are active, or even hyperactive who want to get all the intention by mastering the flow of the discussions. Some others may only sit still and be good listeners in the group discussions.

Cognitive style significantly influences the students' learning outcomes in Mechanics course. It is possible that the

cognitive style of the students is very strong both for the students with FI cognitive style and those with FD cognitive style. Even without the presence of lecturers or tutors to guide the students in learning, they are already able to set up their own style in an appropriate manner without any influence from the surrounding environment or without having any discussion with their peers from the Physics Education Study Program. The students' self-confidence was relatively high with the cognitive style they had they could have already learned Mechanics independently. This may take place if, before the data collection activities, the students had already been directed and prepared mentally by giving them explanations of the requirements of becoming students of the Physics Education in Indonesia Universitas Terbuka an institution which implements a distance learning system. As the students of this university, they are required to actively seek information and learn independently using learning resources in the library or internet. By then, it is already customary that they can be mentally strong to face any challenges and obstacles in an independent learning setting. It is common for university lecturers to provide all the instructional materials including the supporting documents to the students for the courses. However, studying in the Universitas Terbuka demands the students to be independent in learning the instructional materials without any help from the lecturers or peers for any discussion or exchange of ideas. There is not any opportunity to ask questions or solve problems that they encounter, except if they join any tutorial classes provided by the university both face-to-face and online where they can directly ask questions to the lecturers who are experts in their field.

Furthermore, for the influence of independent learning and cognitive style altogether on the students' learning outcomes, it was found that the significance value obtained was 0.021. This value is smaller than $\alpha = 5\%$ or $0.021 < \alpha = 5\%$, so that it can be concluded that the model is fit (independent learning variables and dependent cognitive style variables altogether have a significant influence on the students' learning outcomes). It was possible that the influence of independent learning and cognitive style of the students altogether were helpful in taking the Final Semester Exam in Mechanics course. Final Semester Exam is a form of evaluation which is conducted by the students to identify their learning achievement in compliance with the pre-determined competences and conducted at the end of the education unit. The purpose of having this final exam semester is as a form or evaluation or test to measure the achievement of the students' competencies after doing independent learning in understanding the module for one semester. In addition, the final semester exam can also be used to monitor the students' learning progress during the learning process to provide feedback to develop the learning program.

Interview

Questions	Yes (%)	No (%)
Part 1	5	95
Did you find any difficulty in answering the questions?		
Did you have any difficulty in shading the options?	35	65
Did you have to think to answer the questions?	45	55
Part 2		
Did you find any difficulty in answering the questions?	45	55
Did you have any difficulty in shading the options?	65	35
Did you have to think to answer the questions?	75	25
Part 1		
Did you find any difficulty in answering the questions?	65	35
Did you have any difficulty in shading the options?	75	25
Did you have to think to answer the questions?	85	15

From the above table, it can be concluded that in answering the questions in the cognitive style questionnaire it took some time to think before shading the boxes, and this questionnaire was considered to be hard enough for the respondents. This could be the problem why there was only one respondent who returned the questionnaire through postal service. This was due to the fact that the respondents needed some time to answer each of the questionnaire items and they might find difficulties in answering them

Discussion

The difficulty identified by the students in learning Mechanics as the respondents of this study was a unique and interesting topic to discuss. During the data collection activities, the students asked the researcher to explain some materials in Mechanics course particularly to explain in details the problems put in the exercises and formative test practices. This happened because they knew that the researcher was a lecturer in Physics at Universitas Terbuka. The researcher then decided to provide some necessary explanations as requested by the respondents. After that, the data collection was conducted. As a lecturer in Physics Education, the researcher feels glad to help the students. This was also felt by the students as it could be seen from their facial expressions that they were happy to get some learning experiences from the researcher. Thus, it can be said that the atmosphere during the data collection activities was quite pleasant and the time flew. The time passed so quickly and the researcher and respondents had lunch together and in a warm familial atmosphere. From this experience, it can be concluded that UT students actually missed the learning atmosphere such as this face-to-face meetings with their lecturer, gathering in one place in spite of the fact that they lived remotely from the unit and they had to learn independently. The students actually had other activities such as teaching and else.

Another finding identified from this study is that the cognitive learning style of the students of Physics Education in Indonesia Universitas Terbuka was given by GOD Almighty. It is embedded in their nature as humans that they had different cognitive learning styles. Also, the cognitive learning styles were also influenced by the students' physical and social environment, although not significantly. Physics as part of Science mainly consists of four aspects, namely content or product, process or method, behavior and technology. In every learning process, there is usually a set of graduate competence standard for the students including behavioral skills,

knowledge, and skills. The component of content or also known as knowledge in Physics plays an important role and is significantly influential to other components since having the right knowledge can also grow and practice scientific behaviors, abilities, and good skills. One of the many things to consider in learning is the different characteristics of students in obtaining and processing information conveyed and discussed in the learning process. Each individual has different characteristics, including characteristics in learning. Students generally show different responses when faced with the same learning situations and conditions; some may be enthusiastic about certain teaching and learning methods, while others feel less enthusiastic. The different responses expressed by different individuals are related to different perceptual and intellectual characteristics that make them respond differently to the situation at hand, this difference is what is referred to cognitive style. Cognitive style is a bridge between cognition and action which represent an individual's personality, and is a process or control style which occurs from the students who are situational and can determine the activities of the students who are fully conscious in regulating, organizing, receiving, and distributing information as well as a determinant in the students' behaviors. Consequently, cognitive style can be considered as a way that the students do to obtain, process, and execute information in the form of action or behavior during the learning process and completed by the students in a consistent manner. Cognitive style can be distinguished based on several grouping methods. One of them is done by Witkin (1977) who identified and classifies individuals based on the characteristics of a global/analytic continuum. An individual with an FD cognitive style is a person who is ready to accept existing structures or information, thinks globally, has social interactions, chooses professions that require social skills, and tends to follow existing goals and information and prioritize external motivations. Meanwhile, individuals with an FI cognitive style are individuals who are able to analyze objects by not depending on the surrounding information, organize objects, have an impersonal orientation, prefer professions that tend to be individualistic, and prioritize internal self-motivations from themselves. The mastery of concepts between the students with FD and FI cognitive styles is similar with the process of learning between these two individual characters. In particular, in Mechanics course, the students are all required to experiment in groups and discuss the results of the experiments with each other in an effort to understand the concept.

VIII. Conclusions

1. Significantly, independent learning variable does not have any significant influence on the students learning outcomes in Mechanics course, meanwhile the significance value of cognitive style obtained = 0,000 <α = 5%,

2. The value of the cognitive dependent style is significance at = 0,007 <α = 5%, which means that the FD cognitive style greatly influences the learning outcomes of the students in Mechanics course, and

3. The field dependent t-test value is significant at 0.021 which is lower than α = 5%, which means that the model is already fit and suitable (independent learning and cognitive dependent style altogether influence the students' learning outcomes in Mechanics course).

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Exploring Online Digital Tools for Engaging Students in Learning

Theophile Owona Awana

Abstract—There are many digital tools available online that can be used in classrooms, however, teachers must know how to use them as a part of learning. Technological Pedagogical Content Knowledge (TPACK) framework allows teachers to understand how to select a technology that supports pedagogy for enhancing content understanding. This paper explains the TPACK framework and uses digital tools as a component of TPACK to support learning. The author also share the following link http://c4lpt.co.uk/top100tools/ with 200 tools from preschool to higher education that educators can explore and use in their classrooms. Exploring these tools creates an opportunity to recommend digital tools to educators, schools, administrators, and parents. There is no excuse for not trying digital tools in 21 century.

Keywords—Online, digital, tools, literacy.

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Are Trainers Really Omniscient?

Ushakiran Wagle

Abstract—Teacher Training programmes for EFL teachers in Nepal are largely trainer- driven and trainer- centered. Eastern philosophy believes that those who provide knowledge are Gods. Thus, the trainers symbolise that concept, presenting themselves as omniscient beings, while trainee-teachers seemingly participate in the training process as obedient disciples. These training programmes assume that the input by trainers is everything and the teachers after completing the training programme will go to their classroom and apply that knowledge. As a result trainers keep on theorizing the training issues in the hall. However, the teachers, after they go away form training halls and enters to the classroom they continue their old fashioned classroom cycle. They completely forget the theory that they have learnt from their omniscient trainers.

Addressing the notion of action and reflection is really very important to make the larger effect of teacher training. Unless the participants share their own experience and understanding to others from the same community, their understanding will not be clear.

With this concept of providing experience and chance to share their world, we designed a primary teacher training programme based on activity based instruction. Normally, trainers keep on talking in training hall and trainees become passive recipients. In our case, we added the notion that trainees won't act as passive recipients rather they will share their experiences and reflect on their own teaching styles. When trainees get chance to share their feelings, and to involve in different activities help to develop a clearer understanding of the teaching learning principles which the trainers were trying to establish.

The result is that the teachers who involved in our activity based training are confident to teach by developing their own language games and activities even without referring to the books. This has been a successful experiment of preparing teachers with a long term effect of the programme. My talk is on sharing the programme structure and its components.

Keywords—Omniscient, activity based instruction, trainer-driven, theorizing the training.

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Anaphoric and Structural Arguments of "Otherwise"

Dilsah Kalay

Abstract—Discourse connectives are proved to be critically important in communicative writing as they are utilized in order to reveal some relationships between specific clauses and sentences, which facilitates the interaction between the communicator and the interlocutor in terms of better understanding of discourse units. Another assumption on this case may be that the semantics of those units are not limited to single sentences within that specific discourse, on the other hand the meaning may be laid between the lines depending on the connectives related to adjacent units, which makes the arguments on discourse connectives much more complicated. To this end, the present paper attempts to investigate the discourse connective "otherwise" in English context. A corpus study has been carried out and Corpus of Contemporary American English (COCA) has been searched to determine different sense occurrences with respect to both anaphoric and structural arguments. After analyzing the collected data from COCA, some more lexico-syntactic characteristics of anaphoric arguments have been determined, as well.

Keywords—Otherwise, discourse connectives, corpus study, COCA.

I. INTRODUCTION

DISCOURSE connectives have a crucial role in daily communication since they are used to indicate some relations between individual clauses and sentences, which helps communicators to come up with coherent understanding of discourse units. Another interpretation about this case might be that the semantics of these discourse units may not be limited to the single sentences available in the discourse. That is to say, it depends on the discourse connectives to relate adjacent discourse units, which complicates the arguments of those connectives.

Within this perspective, the main aim of the current paper is to negotiate the semantics of the discourse connective "otherwise". A corpus study was carried out to shed some light on the meaning and use of *otherwise* and some empirical support was intended to be presented. Moreover, arguments provided by the connective *otherwise* were identified with the help of data taken from Corpus of Contemporary American English, shortly COCA.

II. ARGUMENTS OF DISCOURSE CONNECTIVES

Discourse connectives may be coined either by subordinate conjunctions or adverbial phrases, which is highly related to the term adjacency. Webber et. al. (2001) explains adjacency as follows:

"Adjacency leads the hearer to hypothesize that the second clause is related to its left - adjacent neighbor and more specifically, that a form of rhetorical relation holds

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between the two." (p. 3).

They also propose that adjacency is the facilitator of the inference and there are two different relations between adjacent discourse units; namely *explicit structural connectives* and *inferred relations* (p. 3). Following examples provide an explanation for better understanding:

1. **a.** This is not just a matter of honor, **although** this is critical. (Taken from COCA)
1. **b**. You shouldn't trust John. He never returns what he borrows. (Taken from Webber et. al., 2001)

(1a) is an example of explicit structural connectives whereas 1b illustrates inferred relations between adjacent units. As observed from the examples, both of them require adjacency and therefore they are structurally connected; which suggests that semantics can be organized by syntactic structures.

On the other hand, there is also another category called discourse adverbials. Webber et. al (2001, 2003), Miltsakaki et. al. (2003) and Miltsakaki et. al. (2004) put forward that they are different from structural connectives with respect to their arguments. Actually, these discourse adverbials behave not like structural connectives, instead like anaphors. In other words, they obtain one argument structurally and one argument anaphorically, which means that for proper interpretation of arguments, the notion of anaphora resolution is needed (Lai, 2004).

However, although yet they are proved to be different, according to Webber et. al. (2001), there is a similarity between structural connectives and discourse adverbials, which is *"...Like verbs, they can both be seen as heading a predicate-argument construction; unlike verbs, their arguments are independent clauses."* (p. 3).

III. DIFFERENT SENSES OF *OTHERWISE*

In addition to the interpretations mentioned above, *otherwise* - not having such discourse relational properties - has other senses, as well (Lia, 2004). So as to differentiate between that, the following examples should be examined:

(2) The key factor in treating addictions, celebrity <u>or otherwise,</u> is recognizing that there's usually an underlying mental-health problem.

(3) The guy, from what we understand, put up with it because he was on camera; didn't know how to act <u>otherwise</u>.

(4) The boy was in <u>otherwise</u> good health; he had no abnormal psychological symptoms and retained a normal degree of consciousness throughout the acute phase of the disease.

(5) Jamie watched his mother greet each person by name, thanking them quietly for coming <u>but otherwise</u> barely responding to their mumbled expressions of sympathy.

(6) If desired, dip slices in the beaten egg. <u>Otherwise,</u> sprinkle with salt. (Taken from COCA)

In example (2), preceding *otherwise* there is a conjunction "or". Generally, this connector is presented with a noun or adjective to emphasize opposites or alternatives. However, such kind of usage (X or otherwise), as is the case in example (2), may be substituted with the statement of "X or not X". Likewise, it may be possible for *otherwise* in example (3) to be replaced with "differently" or "by other means". Semantically, the sentence presenting the connector in this way may offer other possible options. According to Lia (2004), neither of these senses behaves like a connective since they do not relate two discourse units (p. 2).

Moreover, *otherwise* can be used to identify the features of an entity. In the example (4), *otherwise* acts as a modifier in an adjective phrase whereas in example (5), it appears as a clausal modifier. In both cases, some properties that conflicts with a more general one are presented. The meaning of the connective might be explained as "in other respects".

Lastly, a conditional usage is presented in example (6). The only reason for the discourse unit subsequent to *otherwise* to be performed is on the condition that the previous action fails, as it is the case with 'If desired'. "If not" or "else" are proper substitutes for this use. But for this conditionality, there may not be such a discourse connective usage.

IV. BACKGROUND STUDIES ON INTERPRETATION OF *OTHERWISE*

Webber et. al. (1999) proposes that *otherwise* can be accepted as an assertion. To explain, when there is a condition presupposed in the discourse (symbolized with *C*), "*otherwise* + statement (*a*)" means that the statement (*a*) is true matching our real world knowledge on the condition that *C* is not. In others words, *a* may be acknowledges as an alternative to *C*. This is the anaphoric argument provided by *otherwise*.

Kruijff-Korbayova and Webber (2001) continue working on *otherwise*; however this time, they investigated the impact of information structure on the argument of *otherwise*. Roberts (1996) defines information structure as "*a structure on information—on the inquiry pursued in discourse and the information which that inquiry yields—and not on the utterances or sequences of utterances used to present it*" (p. 6:2). Halliday (1967) characterizes information structures as a version of sentence presenting information in a related way to the prior context. This relationship may have such functions as theme/rheme, focus/background or old/new (Roberts, 1996; 6:2). Here, theme illustrates the given (background) information whereas rheme symbolizes the new information.

Regarding the presupposed condition *C* mentioned before, if antecedent is present in a if-then statement, *C* might appear in if-clause, that is theme, or main clause, which is rheme. Furthermore, *C* might also show up as just a part of two components. Therefore, it is not sure for the statement to comply with the theme of its antecedent.

Keeping this in mind, Cresswell (2002) analyzes the relationship between *otherwise* and its antecedents. It was revealed that generally *otherwise* appears close to its antecedent. However, there are some other conditions in which *otherwise* occurs as a part of theme or rheme. Lia (2004) determined these conditions as if-clauses, modal infinitival clauses and some certain classes of verbs.

Furthermore, Webber et. al (1999) suggests an implicit use of *otherwise* in other discourse relations such as inferential because. However, according to Lia (2004) these causal relations require more in-depth investigation.

V. A CORPUS STUDY OF *OTHERWISE*

The present study aims at investigating meaning and use of *otherwise* with respect to its anaphoric and structural arguments. Lia (2004) conducted a similar study by examining three different corpora, namely *The Wall Street Journal* corpus, consisting of 1 million words from the editions of that newspaper published in 1989; *The Brown* corpus, composing of 1 million words from American English texts printed in 1961; and *The Switchboard* corpus, including 3 million words of conversational speech (2500 conversations from 500 speakers). However, this study will be carried out analyzing data taken from Corpus of Contemporary American English (COCA).

The main concern of the paper is the anaphoric argument. That is to say, the properties used in resolution for anaphoric constructions of *otherwise* are determined. The study has adopted a methodology similar to Lia's (2004) study, which also follows the study by Miltsakaki et al. (2003) of the discourse adverbial "instead". In the study, COCA has been searched to determine different sense occurrences in terms of both anaphoric and structural arguments. After analyzing the data, some more lexico-syntactic characteristics of anaphoric arguments have been determined, as well.

VI. DETERMINING SENSES OF *OTHERWISE*

A total of 27.142 entries of *otherwise* were identified in the corpus. As Lia (2004) mentioned, there are four senses of *otherwise*. However, for sure, not all of them acknowledge an anaphoric argument.

Additionally, so as to determine lexico-syntactic properties of senses, which are identified as non-connective, it seems required to understand the semantics of otherwise as an adverbial phrase.

The sense of "or otherwise" is the easiest to identify according to Lia (2004) and it is also similar to "and otherwise" when the following occurrences (7a-b) are analyzed. This means that when *otherwise* comes directly after *and* or *or*, it does not carry anaphoric argument.

(7) a. Others feared the disruptive consequences, intended <u>or otherwise</u>, of revealing confidential communications and even welcomed a counterattack by governments to take back control of information and protect it with firewalls and enhanced security.

(7) b. This exposed her to the thought -- published <u>and otherwise</u> -- of the likes of H. J. Fleure, G. G. Chisholm, P. Geddes, A. J. Herbert-son, and others.

As another sense, "differently/by other means" can only be identified analyzing the closest verb (generally the

immediately previous) modified by *otherwise* in the statement as is the case in example (8). Lia (2004) proposes that this sense can be observed more frequently in written corpora whereas for the sense "in other respects", the case is vice versa.

(8) They could <u>behave otherwise</u> but choose not to restrain themselves.

As illustrated in Example (9), since it is a part of an adjective phrase, the third sense "in other respects" seems to be identified syntactically. There may a be determiner or a preposition preceding *otherwise* (exemplified in Example (4) - *in otherwise good health*).

(9) She had ruined an <u>otherwise</u> perfect and successful marriage.

However, the causal modifier sense is a little bit harder to identify. They generally occur in conjunction with *but*. In such sentences (Example (5)), *(but) otherwise* is used to refer to general properties on certain subjects rather than presupposed conditions. An example taken from Lia (2004) is:

(10) But, uh, <u>but otherwise</u> you know we, uh, with PBS and so forth. (From a discussion)

VII. THE RELATIONSHIP BETWEEN *OTHERWISE* AND ITS ANTECEDENTS

Adverbial connectives are responsible for relating two units in clauses. Knott (1996) proposes that there is a test to check connectivity; if it is difficult to understand a statement with an adverbial when it is separated, this means it is a connective. Nevertheless, the antecedent cannot be identified with this test.

Keeping this in mind, the properties of conditional discourse connective sense of *otherwise* are explained in the following section.

7.1. "If" Antecedent and Otherwise

According to Lia (2004), the anaphoric antecedent of *otherwise* can be identified in various constructions such as explicit if-then constructions and causal relationships in implicit if-then constructions. She also provided some frequencies with respect to these constructions. Her analysis concluded that about 26% of anaphoric arguments of *otherwise* are explored in explicit if-then constructions whereas further 12%, yielding causal relationships led by another discourse connective, can be rewritten as an if-then construction as is the in Example (11):

(11) Since today was Sunday, Pauline was off work; <u>otherwise</u>, she might have been the one to find the body.

The causal construction in Example 11 can be paraphrased into a conditional sentence as follows:

(12) <u>If</u> today had not been Sunday, <u>then</u> Pauline had been at work.

Then, the interpretation of *otherwise* will be;

(13) <u>If</u> today had not been Sunday and therefore Pauline had been at work, <u>then</u> she might have been the one to find the body.

As can be understood from the examples, the presupposed condition grows out of the whole sentence of example (11).

Nonetheless, it is required that then-clause of example (12) be in negative form, which is the rheme of example (11) - (12), in order for the structural argument of *otherwise* to be true.

Within this perspective, in such constructions there are some other substitutes instead of "since" like "because". Moreover, the causal relationships can also be emphasized with "thus, therefore, hence, as a result, in conclusion etc." which facilitate *otherwise* conditions. However, Lia (2004) states that what the presupposed condition is; the cause or the result; in such sentences, is not clear (p. 9).

7.2. Relative Clauses

In Lia's (2004) study, about 25% of *otherwise* occurrences appeared in relative clause constructions.

(14) Amphibians breed in small wetlands because they are isolated from fish, <u>which otherwise</u> would devour them.

The paraphrased version of this sentence would be:

(15) Amphibians breed in small wetlands because they are isolated from fish. Otherwise, they would devour them.

Another interpretation may be:

(16) If amphibians do not breed in small wetlands, then they would devour fish.

In such statements, the antecedent and the consequent are present in the same sentence. If the relative pronoun is sorted out, the presupposed condition, which is *"the closest clause that involves resolvent as an object"* (Lia, 2004), can be determined easily.

7.3. Modal Auxiliaries

As mentioned before, modal occurrences may infer the anaphoric argument of *otherwise* similar to if-then constructions and relative clauses. In the data taken from COCA, the modals appearing in the antecedent of *otherwise* indicate some thoughts about an action to be carried out in the future. In this sense, these expressions are generally recommendations or obligation statements. Hence, the consequent of *otherwise* constructions makes a remark on those thoughts, evaluating the undesired situations. For example:

(17) Lively sculpins should be stunned with a light whack before fishing. <u>Otherwise,</u> they'll dart underneath rocks to hide.

Possibility is another case indicated by modals in antecedent of *otherwise*. Additionally, a modal can occur in otherwise-clause, as well.

(18) Jill might be in the study. Otherwise she might be in the kitchen. (Taken from Lia, 2004)

However, there are differences between these two uses. Example (17) illustrates predictions, whereas example (18) signals alternatives. Lia (2004) suggests that the major use of *otherwise* is presenting alternatives (p. 7). Additionally, she differentiates these two uses by causal relationships. That is to say, if "because" can be inserted just before *otherwise*, the usage is prediction (as is the case in example 17). However, if "but" can be inserted just before *otherwise*, it is expressing the alternatives (example 18).

Furthermore, there is another use of *otherwise* to indicate

repeatedly occurring states and actions. Lia (2004) gives an example as follow:

(19) We are already committed to establishing man's supremacy over nature and everywhere on earth, not merely in the limited social-political economical context we are fond of today. <u>Otherwise</u>, we go on endlessly trying to draw the line, color and other, as to which kind of man we wish to see dominate.

In example (19), two actions, namely establishing man's supremacy and determining which man will dominate, appear as repetitive actions.

7.4. Verbs in the Antecedent

The verbs appearing in antecedent may sometimes be crucial in identifying the interpretations of *otherwise*. According to Lia's (2004) study, for sure, any verb can be present in the constructions; however, there are some clusters observed. The findings of the analysis revealed that some of the verbs are more likely to appear in the antecedent of *otherwise* than others (p. 8). As an example, "need", "want" and "demand" are used to show some desire while "choose" and "decide" demonstrate refusing alternatives. Moreover, Lia (2004) adds that verbs like "feel", "think", "suggest" are highly used in the if-then constructions when it is an antecedent of *otherwise*.

VIII. CONCLUSION

The discourse connective *otherwise* can be explained as understanding the relations between negation of a presupposed condition and explication of further events. This presupposed condition is the 'left' argument and it is anaphorically argued in *otherwise* constructions.

A corpus study was carried out on the Corpus of Contemporary American English (COCA) and it investigated *otherwise* in terms of both anaphoric arguments and syntactic structures. The use of *otherwise* in if-then constructions, relative clauses, modal clauses were examined and the findings indicated that firstly, many antecedents can be rewritten with if-then constructions, which is because of the occurrence of causal connectives in/near the antecedent. Secondly, the use of *otherwise* with modal clauses came up with two interpretations; prediction/recommendation by evaluating the undesired alternative and expression of various alternatives. Finally, there are certain verbs which are much more likely to form presuppositions in *otherwise* constructions. For sure, any verb can appear in these constructions; however, verbs like *need, want, demand, say, think, decide, suggest etc.* (Lia, 2004) are more prone to clarify interpretations of *otherwise*.

All in all, identification of arguments is subjective and making sense out of statements may change from person to person. Therefore, other analysis may also be required to strengthen the results found out in the present study.

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A Cross-Cultural Pragmatic Analysis of English and Arabic Telephone Opening Strategies

Mohammed Nahar Al-Ali

Abstract—Our study aims to examine the generic structure of informal telephone conversation openings in Arabic and English and the lexico-grammatical encodings of these pragmatic options. To this end, a corpus of 100 naturally occurring telephone conversation recordings was collected from Americans and Jordanians. The recordings were based on the participants' personal cell phones with their families and friends. Drawing on Schegloff's, Pavlidou, and Sun frameworks, the data were analyzed and contrasted for both groups. The results revealed that although the groups of participants come from different cultural backgrounds, they share a set of functional components to structure their telephone openings. However, it was found that there are culture specific functional options like 'ostensible invitation' and 'God-wishes' that are only used by Jordanians but not utilized by the Americans. Besides, each group uses almost different lexico-grammatical devices, linguistic expressions and stylistic options to articulate the functional strategies. These differences can be attributed to various social and cultural backgrounds of the Jordanian and American native speakers. Such findings will hopefully provide some useful insights for native speakers of both languages regarding the structure of telephone openings and the linguistic expressions used to express them.

Keywords—Conversation analysis, genre-pragmatic analysis, telephone openings, cross-cultural communication.

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Investigating the Coping Strategies of Nursing Students as an Effect on Their Test Anxiety

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Abstract—Objective: Test anxiety has negative effects on students' academic success. Especially in university education, the level of anxiety can increase with the increase of social and individual expectations. The students find a way to cope with anxiety and apply this method to deal with many other worrying issues throughout their life. The aim of this study is; determining the anxiety levels of nursing students before the practice of Women Health and Diseases Nursing Practice course and how they cope with the test anxiety. Materials and Methods: This descriptive study was carried out with 139 students in the 2017-2018 academic year in nursing students who took Women's Health and Diseases Nursing Practice course. Student information form, State and Trait Anxiety Inventory (STAI Form TX I-II), Beck Anxiety Inventory (BAI) and Subjective Units of Distress Scale (SUDS) measurement tools were used. Results: There was no statistically significant difference between the mean scores of STAI Form TX I-II, BAI and SUDS scales and gender, age, family place and parental association. 44.6% of students use a method to cope with test anxiety. The mean STAI Form TX I-II and SUDS scores of the students who used any coping method were lower than those who did not. The most common method was breathing exercise (14.4%). There was a statistically significant positive correlation between STAI Form TX I and II and there was a statistically significant positive correlation between STAI Form TX I and SUDS. Conclusion: As a result, it was determined that the anxiety levels of the students without any coping methods were higher than the others.

Keywords—Coping, nursing, student, test anxiety.

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The Relationship between Nursing Faculty Students' Gender Perception and Their Entrepreneurship Characteristics: A Cross-Sectional Study

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Abstract—Background: As most of the nurses across the world are women, one of the barriers that should be overcome in sustaining professional development is gender inequality. Although entrepreneurship is considered to be one of the recently defined roles of nursing, it offers an expansion and development opportunity for the field of nursing. No research has been found in the literature that evaluates together the gender perceptions and entrepreneurship characteristics of nursing students. Objective: The aim of the current study is investigate the relationship between gender perception and the entrepreneurship characteristics of nursing faculty students. Design: This study design was cross-sectional. Settings: We targeted students in an university, in the capital city of Turkey. Participants: The sample consisted of 243 nursing students. Methods: The questionnaire form consisted with sociodemographic characteristics, "The Perception of Gender Scale (PGS)" and "The University Students Entrepreneurship Scale (USES)", was used for data collection from nursing students in a classroom setting. Results: The PGS mean score was calculated to be 103.74 ± 15.52, and the USES mean score was calculated to be 140.18 ± 21.48 in this study. It was determined that there was a statistically significant, positive and moderate relationship between the PGS and USES mean scores ($p<0.005$). However, the gender perception of the students who were willing to continue postgraduate education and who were willing to work as academics was more positive and their entrepreneurship levels were higher than others in this study ($p<0.005$). Conclusions: The entrepreneurship levels of students increased as their positive attitudes towards gender increased in the study. The gender perception and entrepreneurship levels of nursing students should be determined and learning activities might be improved and carried out by academics in an effort to train entrepreneurial nurses of both genders. Providing new data on nursing students and nurses in different cultures may enhance different perspectives on the matter.

Keywords—Gender, gender perception, entrepreneurship, nursing, nursing students.

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Hyperbilirubinema and Successful Breastfeed in Newborns

Serpil Özdemir, Burcu Yılmaz

Abstract—Hyperbilirubinemia is an important health problem frequently seen in newborns. In our country, it is estimated that 60-70% of term babies have hyperbilirubinemia. American Pediatrics Academy (APA) and Turkish Neonatology Association (TND), as well as phototherapy, blood exchange and pharmacological agents for the treatment of hyperbilirubinemia; emphasizes the necessity of breastfeeding. Health problems such as hyperbilirubinemia, respiratory tract infections, diarrhea and asthma that may develop in the newborn with breastfeeding and / or severity decrease. In this review, a literature review about the subject and published articles and printed books have been used. From the first moment after the birth; There is a need for planned and systematic breastfeeding training in order to realize the first skin contact between mother and baby, start breastfeeding and maintain breastfeeding appropriately and effectively. Breastfeeding education provides the mother with sufficient information, trust that the milk can be enough for her baby and the health service required to sustain the breastfeeding. In the literature, it is reported that regular follow-up, risk groups and requirements to protect the newborn from the threat of hyperbilirubinemia and the health of nursing care that includes breastfeeding education will be effective.

Keywords—Neonatal Hyperbilirubinemia, Kernicterus, breastfeeding.

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The Effect on the Smoking and Health Behavior of Wellness of Students Who Are Learned in the University of Health Sciences

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Abstract—Objective: To evaluate healthcare students' wellness and to determine the relationship between wellness and other lifestyle-related behaviors including diet, exercise, sleep, stress, and tobacco and alcohol consumption. Material and Method: This descriptive cross-sectional study surveyed 984 students at the University of Health Sciences in Ankara, Turkey. Data were collected using a questionnaire that included questions on sociodemographic characteristics and a Turkish version of an established health and wellness measure. Results: The data revealed that 17.8% of the students smoke. There was no statistically significant difference between the participants' wellness scores and their smoking status. However, the student's wellness was significantly associated with physical activity (p < 0.001), which, overall, was deemed as insufficient in this population. Statistically significant associations were also identified between participants' wellness and their ability to cope with stress and regular sleep (p < 0.001). Conclusion: Healthcare students do not engage in sufficient physical activity and that this affects their overall wellness. Therefore, academic institutions should provide more opportunities for students to exert themselves physically through a diversity of inclusive activities. Such efforts, in addition to promoting healthy sleep and stress-coping practices, will greatly benefit students' short- and long-term health and wellness.

Keywords— Healthcare students, lifestyle-related behavior, physical activity, smoking, wellness.

I. INTRODUCTION

ACCORDING to the World Health Organization (WHO), the three highest causes of death in 2016 were ischemic heart disease, stroke, and chronic obstructive pulmonary disease (COPD). The main risk factors for all three morbidities have been associated with the use of tobacco and tobacco products. WHO's most recent 2018 report indicated that smoking-related mortality includes 7.2 million people per year worldwide [1]-[3]. Smoking has been estimated to play a role in 23% of the deaths in Turkey, approximately 100.000 people annually [4]-[6]. Research has shown that over 80% of cigarette smokers worldwide started smoking before the age of 18 and then grew dependent on the habit, especially during their university years [7], [8].

Wellness refers to a holistic state of well-being of the body, mind, and spirit and is facilitated by healthy lifestyle-related behaviors including physical activity, balanced diet, effective stress management, spiritual development, responsible decision-making, and nurturing interpersonal relationships [9], [10]. Youth is characterized by rapid physical, spiritual, and social developments. During this period, it is particularly important to address high-level wellness issues, which can, in turn, improve health status for the remainder of an individual's lifetime. However, many university students smoke to cope with education-related stresses and to relax [11]. Furthermore, it has been reported that smoking is surprisingly common among healthcare professionals, including doctors and nurses with anti-smoking attitudes and beliefs, which represents occupational groups not expected to engage in smoking behavior [12]. As such, it is of great importance to encourage healthy behaviors in impressionable student populations, as these will become the role models for and leaders of future generations.

Therefore, the purpose of this study was to determine the effects of smoking and other lifestyle-related behaviors on the wellness of healthcare students attending the Health Sciences University in Ankara, Turkey.

II. METHODS

The cross-sectional study described here was conducted with approval (Pro 2018 -18/66) from the Institutional Ethics Committee of the Health Sciences University in Ankara, Turkey. All procedures were conducted in accordance with the principles set forth in the Declaration of Helsinki. All subject provided written informed consent prior to their participation in this study.

Data for this study were generated using a survey conducted at the Ankara Health Sciences University during the 2018 - 2019 academic year. The study group included 36.36% of the total student body enrolled at the university at that time. A stratified sampling method was used for which faculty and class served as the strata. Academic faculty members were classified into three groups according to field and education level: Medical Faculty, Nursing Faculty (four years of education), and junior technical health college (two years of education). Two researchers administered the questionnaire to each faculty group. To maximize the number of student participants, their surveys were administered directly before or after class periods.

Study information, including a description of the questionnaire, was delivered by a research assistant who was

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instructed to emphasize that participation in the study was neither expected nor required. The questionnaire employed in this study was designed to both collect sociodemographic data and to assess the wellness of the participants using a Turkish version of the Wellness Evaluation of Lifestyle (WEL) measure. Myers et al. (2000) first developed the WEL scale and Dogan (2004) adapted it for use among the Turkish population. In total, the adapted questionnaire included 83 items, which the participants rated using a four-point Likert-type scale (4 = always, 1 = never), and required approximately 20 minutes to complete. A higher score was indicative of greater overall wellness.

TABLE I
CRONBACH'S ALPHA COEFFICIENTS AND BASIC COMPONENT ANALYSIS RESULTS

	Substance analysis	Basic component analysis	Cronbach's alpha coefficient (0.954)
Total correlation coefficients < 0.30	4, 8, 15, 18, 19, 21, 26, 28, 75, 82	-	0.959
Factor load < 0.40	-	38, 39, 43, 47, 52, 73	0.956
Items included in the adapted scale's total score	1 2, 3, 5, 6, 7, 9, 10, 11, 12, 13, 14, 16, 17, 20, 22, 23, 24, 25, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 40, 41, 42, 44, 45, 46, 48, 49, 50, 51, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 74,76, 77, 78, 79, 80, 81, 83		

Upon its development, the original scale's high reliability was reflected by its Cronbach's alpha score of 0.92. The adapted scale's internal consistency and construct validity were confirmed to be valid and reliable for the purpose of this study, as well. The scale items corresponding to the data structure obtained from the sample were determined again. Using scales as a measurement tool requires that they be developed, tested, and their suitability questioned in light of the cultural context and the area of use. To assess and ensure a high level of accuracy, the psychometric properties of the adapted scale were initially evaluated by its Cronbach's alpha coefficient and, next, using basic component analysis (BCA). The item-total (whole) correlation coefficient minus and the reliability-reducing substances that were less than 0.30 were excluded from the scale by item analysis (Table I). Cronbach's alpha coefficient was recalculated to confirm acceptable levels of internal reliability were achieved. Finally, a BCA was used to establish the scale's structural validity. This study used the total wellness score as its metric and sub-dimensions were not considered. First, factor loading was examined and items equal to or less than 0.40 loaded with more than one factor were excluded from further analysis. The Cronbach's alpha coefficients and factor loading scores from the BCA describing the remaining scale items are presented in Table 1. Data from these analyses support the validity and reliability of the adapted survey tool employed in this study.

Continuous data were represented as means with their standard deviations and categorical data as frequencies and percentages; both were evaluated using descriptive statistics. The distribution normality of the data was confirmed with the Kolmogorov-Smirnov test. The two groups that met the parametric assumptions sum of scale in the variable distribution of the Mann-Whitney U test the scale has two variables in total of the above set of distributions were compared using the Kruskal-Wallis test. The Bonferroni-corrected Mann-Whitney U test was used for post-hoc evaluation. All statistical analyses were performed using IBM SPSS v21 (IBM SPSS Inc., Chicago, IL, USA) with a statistical significance level of $p < 0.05$.

TABLE II
PARTICIPANTS' SOCIODEMOGRAPHIC CHARACTERISTICS AND LIFESTYLE-ASSOCIATED BEHAVIORS

Total (n = 984) Age range: 17 - 29 years old Mean ± SD = 19.62 ± 1.67 years old		
	N	**%**
Sex		
Male	272	27.6
Female	712	72.4
Education status		
Medical faculty	245	24.9
Nursing faculty	477	48.5
Junior technical health college faculty	262	26.6
Class		
Year 1	562	57.1
Year 2	205	20.8
Year 3	137	13.9
Years 4	80	8.1
Place of residence		
Dormitory	559	56.8
Family home	355	36.1
Friends	70	7.1
Smoking status		
Smoker	175	17.8
Non-smoker	809	82.2
Alcohol use		
Yes	133	13.5
No	851	86.5
Balanced diet		
Yes	504	51.2
No	480	48.8
Physical activity		
Yes	337	34.2
No	647	65.8
Regular sleep patterns		
Yes	415	42.2
No	569	57.8
Effective stress management		
Yes	493	50.1
No	491	49.9

III. RESULTS

In total, X students participated in the present study. The mean age of the students was 72.6% (n = 712) and their mean age was 19.62 ± 1.67 years old (range: 17 - 29 years old).

Of the participants, 72.4% (n = 712) were female, 48.5% (n = 477) were nursing students, and 57.1% (n = 562) were in their first year of study. Slightly over half of the respondents lived in university dormitories (56.8%, n = 559). In terms of lifestyle-associated behaviors, 82.2% (n = 809) of the students were non-smokers and 86.5% (n = 851) did not consume alcohol. Half of the students reported consuming diets that failed to meet the nutritional recommendations (51.2%; n = 504) and 65.8% (n = 647) did not engage in regular physical activity (Table II).

TABLE III

ASSOCIATIONS BETWEEN LIFESTYLE-ASSOCIATED BEHAVIORS AND WELLNESS ACCORDING TO PARTICIPANTS' DEMOGRAPHIC CHARACTERISTICS

(N = 984)	n	Mean ± SD	Descriptive statistic		
			z	p	χ^2
Sex					
Women	712	131.12 ± 24.50	0.98*	0.324	
Men	272	136.42 ± 36.90			
Education status					
Medicine Faculty	245	136.57 ± 28.72			
Nursing Faculty	477	130.26 ± 25.25		0.103	4.548**
MYO	262	133.08 ± 33.33			
Class					
1	562	130.70 ± 27.65		0.011***	
2	205	136.03 ± 30.38		(1-3 grade p = 0.006	
3	137	138.64 ± 31.08		3-4 grade	11.159
4	80	126.60 ± 22.63		p = 0.003****)	
Place of residence					
Dormitory	559	134.05 ± 29.77			
Family home	355	130.13 ± 24.91		0.205	3.172
Friends	70	133.35 ± 34.86			
Smoking					
Yes	175	131.06 ± 27.28	1.12	0.261	
No	809	132.92 ± 28.82			
Alcohol					
Yes	133	137.45 ± 29.92	1.74	0.082	
No	851	131.82 ± 28.27			
Balanced diet					
Yes	504	128.15 ± 27.84	5.11	p < 0.001***	
No	480	137.4 ± 28.58			
Physical activity					
Yes	337	137.03 ± 26.95	8.10	p < 0.001***	
No	647	124.05 ± 29.62			
Regular sleep					
Yes	415	136.45 ± 26.80	6.25	p < 0.001***	
No	569	127.28 ± 30.02			
Coping with stress					
Yes	493	139.83 ± 24.54	9.86	p < 0.001***	
No	491	125.36 ± 30.40			

* Mann-Whitney U test; ** Kruskal-Wallis test; *** p < 0.05; **** Mann-Whitney U test with Bonferroni post-hoc correction.

The data presented in Table III describes the relationship between the students' demographic characteristics and lifestyle-associated behaviors and their wellness scores. Further analysis revealed that the mean total scores between the class years were significantly different (χ^2 = 11.159, p = 0.011). When the relationship between total wellness score and smoking status was analyzed, no statistically significant difference was found (z = 1.12, p = 0.261). The associations between total wellness scores and overall physical activity were found to be statistically significant (z = 8,10. p < 0.001). There were also statistically significant associations between the mean wellness scores of the entire participant population and healthy sleeping habits (z = 6.25, p < 0.001). Finally, statistical analysis confirmed that the relationship between average total wellness and effective stress-management was also significant (z = 9.86, p < 0.001).

IV. DISCUSSION

Most university students are between the ages of 18 and 21, which is a developmental period characterized by dramatic changes involved in the transition to adulthood. Due to the high-stress levels experienced during this period, young people are

not aware of the effects of their unhealthy behaviors and are less likely to participate in behaviors that contribute to a healthy lifestyle. The high rate of smoking among university students has prompted extensive research on the effects of smoking cigarettes on health-related outcomes worldwide [13], [14]. Students attending Ankara's University of Health Sciences were expected to exhibit healthy lifestyle-related behaviors both as youths and as adult healthcare providers. According to the present study, the smoking rate among healthcare students in Ankara, Turkey is 17.8%. This finding is in line with the results from multiple other, independent studies [3], [7], [15]; however, this rate has been reported to be as low as 4.4% in a study conducted on male healthcare students in Iran [16]. Organizing programs aimed to facilitate smoking cessation should effectively reduce smoking rates.

The present investigation also revealed that 13.5% of the students surveyed consume alcohol. A published study of the medical faculty generated similar results [17]. The rate of alcohol consumption among the students in our study is relatively low compared to other reports, some of which were as high as 50% [18]. Stressful and intensive working conditions may likely increase the use of alcohol by healthcare students. Therefore, we suggest that academic institutions actively educate their student populations on the damage caused by alcohol consumption and encourage them to adopt healthy lifestyle behaviors.

Wellness has been described as "to live in the body for the individual's social and natural environment and fully functional, mind and soul at the confluence of optimal health-oriented lifestyle and a state of being good" [19]. In addition, balanced nutrition, regular physical activity, and effective stress management are important contributors to a healthy lifestyle. Interestingly, these are also protective against metabolic diseases and can contribute to reduced morbidity and mortality rates. Students are required primarily to determine the variables that affect wellness. Wellness contributes to the prevention of chronic diseases and wellness programs should be developed in order to promote and facilitate healthy behavior practices [20]. The present investigation found no evidence of an association between sex and overall wellness, which is in support of previous findings described in the literature [20], [21]. In contrast, Myers and Bechtel (2004) found that male students had higher total wellness scores than their female counterparts [22]; interestingly, this difference was detected between students in the second and third grade. This finding might be explained by the students becoming accustomed to the rigor and stresses of the university environment as their education progresses. In a study conducted by Kasapoğlu (2014) on university-aged students, the grades of Grade 4 students were higher than Grade 1 students; this research supports the results of our study. Although the wellness scores of the students who reported to engage in physical activity was higher than those who did not, the former, nonetheless, only reflect a small subset of the student population. This is likely explained by the fact that healthcare students are too busy to dedicate time to "extracurricular" activities such as physical activity due to their rigorous and time-consuming course load. Additionally, the

data collected in this study revealed that effectively dealing with stress contributes to higher wellness scores. Other studies examining wellness among university students have found that increased wellness scores were indicative of adolescents' increased cognitive-emotional abilities and vital target dimensions, which can positively impact their overall health both short- and long-term [23], [24].

V. Conclusions

The findings described here revealed that the students in the health sciences do not engage in sufficient physical activity. Being involved in activities aimed at developing healthy lifestyle behaviors within the university is insufficient for students with intensive educational curricula. Therefore, it is necessary to organize programs that encourage and facilitate healthy behaviors and to increase the number of physical activity programs available to all students.

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Determination of Distress and Causes of Distress in Women Diagnosed with Breast Cancer Who Were Treated with Adjuvant Endocrine Hormone

Derya Çinar, Ayfer Karadakovan

Abstract—Introduction and Objective: Distress is physically, psychologically, socially and spiritually disturbing phenomenon, which makes it difficult to cope effectively with cancer and its treatment. The aim of this study was to determine the level and causes of distress in women diagnosed with breast cancer who were treated with adjuvant endocrine hormone. Materials and Methods: The study was conducted as a descriptive study between January and July 2018 in the Medical Oncology Clinic of a State Hospital. The sample of the study consisted of 71 patients aged between 18-65 years who had non-metastatic primary breast cancer. Data were collected by face to face interview method using the Patient Identification Information Form and NCCN Distress Thermometer measurement tools. Data were analyzed in SPSS 15.0 program and number (n), percentage (%) and average values were calculated for descriptive statistics. P <0.05 was accepted as statistically significant (p <0.05). Results: The mean age of the patients included in the study was 45.35 ± 8.91, 45.1% were primary school graduates and 38.0% were stage II breast cancer patients. As the adjuvant endocrine hormone treatment, 59.2% of the patients were treated with Tamoxifen group and 40.8% of them were treated with Aromatous Inhibitors, 60.6% of them did not receive any prior knowledge / training about the disease and treatment, and 62% of the patients who received any prior knowledge / training reported that they received information / education from a nurse and 23.9% of them received psychological support. When we examined the distress levels according to the adjuvant endocrine hormone therapy; we found in the tamoxifen group, 4,40 ± 2,93 and 4,62 ± 2,56 in the group receiving Aromatous Inhibitor. There was no statistically significant difference between the two groups of distress scores (p> 0.05). The most common causes of distress were family problems 14 (31%), practical problems ,9 (16.9%), physical problems (14.1%) and emotional problems (9.9%). Participants reported the most common problems of family problems as dealing with partner, daily problems as housing, physical problems as pain, emotional problems as nervousness. Discussion: In addition to the problems caused by the treatment of breast cancer, the negative changes in the body image and social disability negatively affect the daily life activities of the patients and cause distress. In a randomized controlled study of cancer patients that nurses trained by telephone before chemotherapy; researchers did not find any decrease in the level of distress, in another study of women diagnosed with breast cancer and who were on psychoeducation and telephone counseling; it was reported that the distress level of patients decreased during adjuvant therapy. Conclusion: As a result of the study; it was determined that more than half of the patients had high distress level and the most frequently reported distress source was family problems. In this context; It is foreseen that support programs including training and counseling provided by nurses to women diagnosed with breast cancer may improve the distress level of patients.

Keywords—Adjuvant endocrine hormone therapy, breast cancer, distress, nursing.

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Investigating the Nurses' Perception of Managers' Leadership Behavior

Serap Torun, Emel Şeker, Osman Bilgin

Abstract— Aim: At functioning of nursing services, manager nurse is responsible for carrying out functions such as management, planning, organization, cooperation, executing and controlling. The aim of this study is to evaluate how nurses perceive managers' leadership behaviors. Material-method: The population of the study is composed from 690 nurses working in a university hospital, the sample of the study is composed from the 112 participant who accepted to involve in face to face interviews and answered all the questions posed. By obtaining needed permissions, data is collected with personal information forms and leadership behavior scale between 15th May 2018 and 10th June 2018. Collected data is evaluated in computer environment; mean, number, %, t-test, f-test, pearson correlation analysis is carried out and level of significance is accepted "p<0,05". Results: Average of participants' age is 30.38±7.77 . 86,6% of the participants are women, 58,9% are married and 57,1% have undergraduate academic degree.. Also, 37,5 % of whom are working in surgery clinic. %86,6 works as clinical nurse, 44,6% work in shift schedule, 35,7 % have 1 to 5 years working experience and 35,7% have 1 to 5 years working experience with their managers. There is no meaningful difference in leadership behavior perception relating to leaders according to nurses' marital status, working status, service time, education level. According to nurses' age group, there has been found meaningful difference in results of one-way-variance-analysis(ANOVA)   of success –oriented leadership(F= 3,310, p<.05)   and directive leadership(F= 3,736, p<.05). Moreover, compared to men nurses (=3,08) women nurses(=3,66) perceive their manager much more directive and perception of directive leadership of nurses who are working at daytime is higher than the nurses working at night shifts. Conclusion: At contemporary sense of leadership, it is expected that supportive and directive leadership should be at the forefront and it can be said that manager nurses working at the hospital where the study took place are usually perceived as success-oriented leaders by the other personnel.

Keywords—Nurses, manager nurse, leadership, behavior, perception.

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Investigation the Medical Malpractice Tendency of Student Nurses

Serap Torun, Osman Bilgin, Ceylan Bıçkıcı

Abstract—Introduction: Medical malpractice can be defined as a permanent or temporary damage occurring in the patient as a result of health workers neglecting to apply the expected standard practice or intentionally failing to do so, applying the expected standard practice incorrectly and/or incompletely or wanting to apply the right practice but failing to do so for various individual or systemic reasons. If the training periods in which health workers improve their knowledge and skills are passed efficiently, they are expected to have a low rate of error in their professional lives. Aim: Aim of the study is to determine the medical malpractice tendencies of students studying in nursing department. Material and Methods: The universe of the study consisted of 580 students who study in 3rd and 4th years in the Nursing Department of the Faculty of Health Sciences in a state university in normal and evening education and go out for clinical practice during the 2017-2018 academic year. The sample consisted of 454 students who agreed to participate in the study. Ethics committee approval, the permission of the institution and the verbal consent of the participants were obtained. In collection of data , 'Personal Information Form' developed by the researchers and the 'Malpractice Tendency Scale (MTS)', which was developed by Özata and Altunkan (2010) and whose validity and reliability was tested, were used. The data were analyzed using SPSS 20 package program. 0.05 was used as the level of significance. Results: The Cronbach alpha internal consistency coefficient of the scale was 0.94 and the total mean value of the scale was 211.69 ± 22.14. The mean age of the participants was $22,08\pm1,852$ years; 165 (36,4%) were male and 288 (63,6%) were female. Their mean GPA was 2.65 ± 0.454 (min 1.03 - max 3.90). Students' average duration of self study per week was 2.89 ± 3.81 (min 0 - max 30) hours. The mean score (80.73) of the 4th year students in the sub-dimension of "Drug and Transfusion Applications" was significantly higher than the mean score (79.20) of 3rd year students ($p<0.05$). The mean score (81.01) of the Drug and Transfusion Applications sub-dimension of those who willingly chose the profession was higher than the mean score (78.88) of those who chose the profession unwillingly. The mean average score (21.48) of "Fallings" sub-dimension of students who cared for 3 to 4 patients per day was lower than the mean score (22.41) of those who cared for 5 patients and over daily on average ($p <0.05$). The mean score (49.18) of the "Hospital Infections" sub-dimension of those with a GPA of less than 1.99 was lower than the mean score (52.38) of those with a GPA of 2-2.99 and the mean score (52.23) of those with a GPA higher than 3 ($p<0.05$). Conclusion: As a result of this study, it was concluded that malpractice tendency of nursing students was low, and an inverse relationship was found between the duration of education and malpractice tendency. The fact that curriculum programs contain subjects related to patient safety increases the awareness of the nursing students and ensures taking measures related to the subject.

Keywords—Nursing student, medical malpractice, nursing, tendency, patient safety.

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The Moderating Effect of Leader Emotional Expressivity on the Relationship between Leader-Member Exchange and Follower Job Satisfaction

Nevra Baker

Abstract—This research attempts to explain the moderating effect of the strength of leader emotional expressivity on the direct effect of leader-member exchange (LMX) on follower job satisfaction. Accordingly, quantitative data were collected through surveys from employees of service-rendering companies in Istanbul. The findings of this research have shown that the strength of leader emotional expressivity weakened the favorable effects of LMX on follower job satisfaction for high LMX leaders. In contrast, higher leader emotional expressivity compensates for low levels of LMX and increases follower job satisfaction.

Keywords—Emotions, follower job satisfaction, leadership, leader emotional expressivity, leader-member exchange.

I. INTRODUCTION

LMX describes the quality of the reciprocal relationship that is formed between employees and supervisors [17]. LMX theory asserts that limitations of the supervisor's time and resources restrict the number of high-quality exchange co-operations the supervisor can establish with subordinates. Therefore, the supervisor determines a narrow group of subordinates with whom he or she shares socio-emotional resources that will result in augmented reciprocal trust, liking, and esteem. This social exchange relationship ensures that selected subordinates obtain more abundant resources from the supervisor and the supervisor acquires enhanced performance and devotion of competent employees. In contrast, low-quality relationships are restricted to the exchange of determinate contractual resources [7], [16].

Emotions are omnipresent in leader-follower interactions, originating from and also affecting them [20], [25]. Because leaders have a deep influence on the activity of organizations and their insiders [6], leader emotional expositions have solid capacity to affect how their subordinates feel, think, and act [8].

In this study, the contribution of LMX to the follower job satisfaction, as well as the moderating effect of the strength of leader emotional expressivity were analyzed.

II. LITERATURE REVIEW

A. LMX and Follower Job Satisfaction

Job satisfaction has been portrayed as a "pleasurable or positive emotional state resulting from the appraisal of one's

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job or job experiences" [18]. With respect to [6], when higher quality LMX relationships are present, job satisfaction should increase because followers make use of the physical and relational advantages of that quality relationship.

LMX researchers defend that leaders manifest diverse leadership behaviors when coping with separate subordinates (e.g. [10]). High-quality LMX employees add more to work accomplishments. Consequently, they obtain higher supervisor consideration and greater encouragement. Low-quality LMX employees, however, do not have the benefit of such advantageous behaviors and experience a more legit relationship with the supervisor (e.g. [10]).

Social Exchange Theory [2] asserts that two or more sides engage in interactive exchanges with one another, for instance in terms of esteem, dignity, companionship and consideration, expecting that the other side will collaborate correspondingly [26]. High-quality LMX employees tend to obtain greater care and help from their supervisors as reciprocity for their diligence. This sort of social exchange will eventually generate higher job satisfaction [19]. Empirical research has also validated that LMX is positively related to employee job satisfaction (e.g. [11], [12], [21], [24], [9].

Numerous studies carried out in the Turkish health, private, educational, and services sectors pointed out a positive relationship between LMX and follower job satisfaction [5], [14], [4], [27], [1], [23].

The above discussion leads to the following hypothesis:

Hypothesis 1: LMX will have a positive contribution to follower job satisfaction.

B. The Moderating Effect of the Strength of Leader Emotional Expressivity on the Direct Effect of LMX on Follower Job Satisfaction

Reference [18] defined job satisfaction as a "pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences". According to us, emotions are a great way to show how one appraises another's deeds. For example, if a leader shows contentedness towards a follower right after his or her action, the follower will think that this action made the leader happy. Or, vice versa, if an expression of anger by the leader follows a follower's action, the follower will think that something is wrong with what he or she has just done. On the other hand, followers of leaders who generally act neutral will not know what their leader feels about how they are doing, and therefore will not be able to get the necessary appraisal from their leaders, which is a prerequisite for job

satisfaction, according to [18]'s definition. Thus, we come up with the suggestion that in case of leaders who engage in a lower level of LMX, a stronger leader emotional expressivity will compensate for the lack of the LMX relationship and increase the perceptions of the followers as being appraised by their leaders, which will contribute positively to their job satisfaction. In contrast, for leaders who engage in a high level of LMX, a strong leader emotional expressivity will be perceived by followers as the leader is expressing an overly-possessive leadership and the leader is crossing a boundary when interacting with followers.

In sum, we expect that leader emotional expressivity (LEE) will compensate for the negative implications of a low level of LMX by encouraging follower job satisfaction. If a leader engages in a low level of LMX relationship, and if this leader demonstrates a high level of LEE, then this high level of LEE will compensate for the lack of LMX by increasing follower job satisfaction. On the other hand, if a leader already demonstrates a high level of LMX, in this case, a high level of emotional expressivity by the same leader will be perceived by the followers of this leader as intimidating and they will feel that their leader is crossing a boundary when interacting with them.   Therefore, followers' job satisfaction will again increase, however less strongly as compared to strong-LMX leaders who demonstrate a lower level of emotional expressivity. Namely, if leaders engaging in a high level of LMX relationship with their followers demonstrate a lower level of emotional expressivity, then there will be a more positive relationship between LMX and follower job satisfaction, in comparison to leaders who demonstrate a higher level of emotional expressivity. In other words, if a high-LMX leader does not express a very high level of emotional expressivity, then follower job satisfaction will increase more strongly with increasing LMX. Thus, we propose the following hypothesis:

Hypothesis 2: The direct effect of LMX on follower job satisfaction will be moderated by LEE, in such a way that the relationship between LMX and follower job satisfaction is more positive for those employees whose leaders are lower on LEE as compared to those whose leaders are higher on LEE.

III. Methodology

A. Research Design

The aim of this study is to test the contribution of LMX to follower job satisfaction. In addition, this study aims to test the moderating effect of the strength of LEE on the direct effect of LMX on follower job satisfaction.

The model depicting the hypothetical relationships is presented in Fig. 1.

Fig. 1 Conceptual model of the study

An employee survey was undertaken in order to test the contribution of LMX to follower job satisfaction and finding out the moderating effect of the strength of LEE on the relationship between LMX and follower job satisfaction. The participants were asked to rate their perception of the LMX and emotional expressivity of their actual leaders, and then they were asked to rate their own actual level of job satisfaction. LMX Scale by [22] and Emotional Expressivity Scale by [15] were utilized for the participants to rate their actual leaders. For the ratings of follower job satisfaction, the items of the job satisfaction scale by [3], shortened to a five-item scale by [13], was used. The questions were read to the participants and their answers were recorded on a tablet PC.

B. Sample

A total of 258 employees working in the services departments from 32 firms were contacted. The average age of the employees is 28.64, ranging from 18 to 62. 94 (36.4%) of the contacted employees are female. 42 (16.3%) of the contacted employees attended only elementary school, 160 (62%) are high school graduates, 54 (20.9%) attended university, and 2 (0.8%) completed higher education. The average working years add up to 8.20, ranging from 1 to 40. The average tenure is 3.69 years, ranging from a minimum of 1 to a maximum of 20 years. 90 (34.9%) of the total of 258 respondents are from the retail industry, 49 (19%) work in the food industry, 48 (18.6%) come from the textile industry, 17 (6.6%) work in the IT sector, 12 (4.7%) are from the electronics industry, 10 (3.9%) work in the financial industry, 8 (3.1%) come from the construction industry, another 8 (3.1%) work in the paper industry, and again another 8 (3.1%) are hired in the agricultural industry, 6 (2.3%) deal with trade, and lastly 2 (0.8%) are employed in customer services.

C. Hypothesis Testing

Regression analysis has been undertaken in order to test the contribution of LMX to follower job satisfaction. For each regression analysis, two models have been created. The first model tests the effect of control variables on the dependent variable, and the second model tests the effect of the independent variables on the dependent variable, in addition to the effect of the control variables on the dependent variable.

For the measurement of the contribution of LMX on follower job satisfaction, the multiple regression models are expressed as:

- Model 1: Follower job satisfaction = β_0 + β_1*(Age) +

β_2*(Gender) + β_3*(Tenure) + ε

- Model 2: Follower job satisfaction = β_0 + β1*(Age) + β_2*(Gender) + β_3*(Tenure) + β_4*(LMX) + ε

In these models; age, gender, and tenure are control variables.

Tables I and II show the results of the multiple regression analysis regarding follower job satisfaction.

TABLE I
MODEL SUMMARY OF THE MULTIPLE REGRESSION ANALYSIS FOR THE CONTRIBUTION OF LMX TO FOLLOWER JOB SATISFACTION

					Change Statistics					
Model	R	R^2	Adj. R^2	Std. Error of the Estimate	ΔR^2	ΔF	df1	df2	Sig. ΔF	Durbin-Watson
1	.12	.01	.00	.98	.01	1.21	3	254	.31	
2	.82	.68	.67	.56	.66	520.76	1	253	.00	2.10

TABLE II
REGRESSION COEFFICIENTS FOR THE CONTRIBUTION OF LMX TO FOLLOWER JOB SATISFACTION

Model	Ind. Variables	Unstd. Coefficients		Std. Coeff.	t	Sig.
		β	Std. Error	β		
1	(Constant)	4.01	.34		11.73	.00
	Age	.00	.01	.00	-.00	1.00
	Gender	-.07	.13	-.03	-.51	.61
	Tenure	-.03	.03	-.11	-1.30	.19
2	(Constant)	.21	.26		.82	.42
	Age	.01	.01	.06	1.20	.23
	Gender	-.04	.07	-.02	-.50	.62
	Tenure	-.01	.01	-.02	-.50	.62
	LMX	.89	.04	.83	22.82	.00

According to the above tables, LMX (β = 0.83, t = 22.82, p < .05) significantly predicts job satisfaction. This model explains 67% of the variance (p < .05). Thus, the hypothesis H1 (LMX will have a positive contribution to follower job satisfaction) is supported.

For the moderation analysis, two models have been created. Along with the control variables, the independent variables of the regression are independent variable, moderator, and the interaction between independent variable and moderator. The first model tests the effect of the control variables on the dependent variable, and the second model tests the effect of the independent variable, the moderator, and the interaction between independent variable and moderator on the dependent variable, in addition to the effect of the control variables on the dependent variable.

The multiple regression models for the moderating effect of LEELEE on the relationship between LMX and follower job satisfaction are demonstrated as follows:

Model 1: Follower job satisfaction = β_0 + β_1*(Age) + β_2*(Gender) + β_3*(Tenure) + ε

Model 2: Follower job satisfaction = β_0 + β1*(Age) + β_2*(Gender) + β_3*(Tenure) + β_4*(ZLMX) + β_5*(ZLEE) + ε

Model 3: Follower job satisfaction = β_0 + β_1*(Age) + β_2*(Gender) + β_3*(Tenure) + β_4*(ZLMX) + β_5*(ZLEE) + β_6*(ZLMX * ZLEE) + ε

In these models; age, gender, and tenure are control variables.

Table 3 and 4 below demonstrate the moderating effect of LEE on the relationship between LMX and follower job satisfaction.

TABLE III
MODEL SUMMARY OF THE MULTIPLE REGRESSION ANALYSIS FOR THE MODERATION OF LEE ON THE RELATIONSHIP BETWEEN LMX AND FOLLOWER JOB SATISFACTION

					Change Statistics					
Model	R	R^2	Adj. R^2	Std. Error of the Estimate	ΔR^2	ΔF	df1	df2	Sig. ΔF	Durbin-Watson
1	.12	.01	.00	.98	.01	.1.21	3	254	.31	
2	.83	.69	.68	.55	.67	267.74	3	251	.00	2.07
3	.83	.69	.68	.55	.00	3.19	1	251	.08	

TABLE IV
REGRESSION COEFFICIENTS FOR THE MODERATION OF LEE ON THE RELATIONSHIP BETWEEN LMX AND FOLLOWER JOB SATISFACTION

Model	Ind. Variables	Unstd. Coefficients		Std. Coeff.	t	Sig.
		β	Std. Error	β		
1	(Constant)	4.01	.34		11.73	.00
	Age	.00	.01	.00	-.00	1.00
	Gender	-.07	.13	-.03	-.51	.61
	Tenure	-.03	.03	-.11	-1.30	.19
2	(Constant)	.47	.32		1.46	.15
	Age	.01	.01	.06	1.26	.21
	Gender	-.01	.07	-.01	-.18	.86
	Tenure	-.01	.01	-.03	-.68	.50
	ZLMX	.70	.08	.65	8.91	.00
	ZLEE	.14	.05	.15	2.84	.00
3	(Constant)	3.67	.20		18.65	.00
	Age	.01	.01	.06	1.26	.21
	Gender	-.01	.07	-.01	-.18	.86
	Tenure	-.01	.01	-.03	-.68	.50
	ZLMX	.64	.07	.65	8.91	.00
	ZLEE	.14	.05	.15	2.84	.01
	ZLMX*ZLEE	-.09	.05	-.10	-1.79	.08

According to the above tables LEE (β = -0.10, t = -1.79, p > .05) does not moderate the relationship between LMX (LMX) and follower job satisfaction. While LEE has a positive contribution (β = .15, t = 2.84, p < .05) to the dependent variable of follower job satisfaction, the interaction of LEE with LMX is insignificant, meaning that there is no moderating effect of LEE on the relationship between LMX and follower job satisfaction. The model explains 69% of the variance (p < .05) in the dependent variable. Therefore, H2 (The direct effect of LMX on follower job satisfaction will be moderated by LEE, in such a way that the relationship between LMX and follower job satisfaction is more positive

for those employees whose leaders are lower on LEE as compared to those whose leaders are higher on LEE) is not supported.

IV. Discussion and Conclusion

As hypothesized and found in H1, followers of leaders with a high level of LMX relationships enjoy a higher level of job satisfaction. Job satisfaction is defined by [18] as a "pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences". The positive relationship between high LMX leaders and their followers should contribute to the followers' positive job experiences.

Contrary to expectations in H2, LEE does not moderate the direct effect of LMX on follower job satisfaction, although LEE has a significant positive contribution to follower job satisfaction. We assumed that the strength of the emotional expressivity of the leaders would contribute to their followers' sense of being appraised by their leader, which is the core of reference [18]'s definition of job satisfaction, which read that job satisfaction is a "pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences"; therefore, we expected that high emotional expressivity would compensate for low levels of LMX. From the findings of the hypothesis testing, we see that the strength of LEE does not have a significant effect on the relationship between LMX and follower job satisfaction, although higher LEE itself still increases the outcome variable.

V. Directions for Future Research

This study does not explain the reason why the strength of LEE weakened the contribution of LMX to follower job satisfaction for leaders who engage in a high level of LMX relationship with their followers.

Therefore, we suggest that follower characteristics such as individualism or egalitarianism values can be studied in future research in order to be able to interpret the moderation of LEE better. We think that follower characteristics, which were beyond the scope of this research, can play a role in the negative moderating effect of LEE on the relationship between LMX and follower job satisfaction. For example, followers, if they share an egalitarian point of view, might more strongly regard the highly emotionally expressive leader as crossing a boundary and become intimidated by that leader.

Acknowledgment

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Ethical Dilemma Evaluation and Ethical Familiarity Situations of the Nurses Working in Adana City Hospital

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Abstract—Aim: This research was carried out with an aim to analyze the ethical decision-making levels of nurses and the effect of taking/not taking ethics course on their ethical decision-making levels. Method and Material: The research is descriptive and consists of 300 nurses, who accepted participating in the research working in Adana City Training and Research Hospital in 2018. The data were collected using a data collection form including the demographic characteristics of the nurses and Nursing Ethical Dilemma Test (NEDT). Descriptive statistical analyses were used for the evaluation of the data. Findings: The average age of the participants is $34\pm 6{,}995$ (min:23, max:51). 98% of the participants are female while 2% of them are male. 78.7% of the nurses participating in the research specified that they took the medical ethics course during their education period while 21.3% of them did not take the ethics course. It was detected that the nursing principled thinking (NP) mean score of the participants was 38.81 ± 6.312 (min:23-max:59) while the practical consideration (PC) mean score of them was 22.25 ± 3.986 (min:15-max:33). The familiarity scores of the nurses regarding similar situations were calculated as 15.42 ± 3.193 (min:11-max:24). Result: It is possible to state that the medical ethics courses given in the nursing education affect their ethical decision-making levels, the professional education facilitates ethical decision-making and creates familiarity with the ethical problems.

Keywords—Ethics, ethical decision-making, nurse, dilemma, medical ethics.

I. Introductıon

ETHICS is the sub-discipline of philosophy that analyzes the universe of the values created by the humankind and interprets them as "good", "bad" or "approvable", "non-approvable", "right", "wrong" [1]. The principles in the field of ethics are in fact one of the ways in which universal values are expressed. It is obvious that we need certain rules and principles in order that our professional attitudes and behaviors in the medical practice have right and reasonable grounds ethically. When being faced with ethical problems or ethical dilemmas, rules and principles have significant contributions in directing the decisions of the health care professionals [2].

The clinical decision making is a complex process and it requires the ability to synthesize information and practice the best one by choosing from the options. The situations related to patient care, institutional events and many professional issues reveal the situations that require nurses to make a decision in their daily practices. The clinical decision-making in terms of nursing refers to the use of nursing knowledge and performing the practice in this regard [3]. By its nature, the profession of nursing requires to handle ethical problems from the beginning of the nursing education. As stated by Kurt et al., "in the clinical environment, it was determined that the nursing students paid attention ethical principles when making decisions about the ethical dilemmas; however, they were affected by environmental factors as well" [4]. The nursing profession is among the professions that individuals deal with many situations and experience dilemmas in the preference of the ethical principles needed to be followed in the action in the decision-making process. Working conditions, expectations of the patients and their relatives, professional knowledge-experience-individual beliefs and values of the other team members are some of the open doors that make nurses to experience ethical dilemma/ethical problem by their knowledge-experience-individual beliefs and status. Nurses experience ethical dilemmas more frequently than ethical problems due to their work status [5].

Nurses can work in almost all units in hospitals. Although the ethical dilemmas and ethical problems, which nurses experience depending on the services and units they work in, differ accordingly, as stated by Cerit, the professional knowledge and skill of nurses, their experience, the quality of their communication with other members of the team and various institution-related factors affect their decision-making level [6]. Nurses increasingly realize that they can present information and participate in decision-making processes involving ethical issues. However, the communication between professionals is often inadequate and this situation does not allow the exchange of views [7]. It can be stated that receiving educating on medical ethics has positive effects in terms of handling the ethical problems that nurses experience frequently due to their profession.

II. AIM

This research was carried out with an aim to analyze the ethical decision-making levels of nurses and the effect of taking/not taking ethics course on their ethical decision-making levels

III. RESEARCH METHOD

The research is descriptive.

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A) The Sample of the Research

The universe of the research was composed of the nurses working in Adana City Training and Research Hospital. The sample of research is the 1096 nurses working in 2018 and the sample consists of 300 nurses who accepted attending the research.

B) Data Collection Tools

The data of the research were collected by using the data collection form and the Nursing Ethical Dilemma Test (NEDT) developed by searching the literature. The validity and reliability of NEDT were conducted in 2010 by Cerit [6]. In the test, the practice of resuscitation on a newborn infant with an anomaly, compulsory drug treatment, a patient's request to die, the adaptation of a new nurse to the clinic, reporting the medication error and not information the adult with a terminal illness are the six ethical dilemma cases. In the B section of each dilemma, there are six expressions that can determine their approaches by considering the case including the ethical dilemma. The nurses were asked to rank these expressions according to their importance levels for them. In line with the answers given to this section of the test, it was aimed to determine the "Nursing Principled Thinking=NP" and "Practical Consideration=PC" levels of the nurses. Nursing principled thinking illustrates the importance given to ethical principles when making an ethical decision in nursing. Practical consideration evaluates the importance given to environmental factors such as the number of patients, available resources, corporate policies, the perception of support provided by the management and physician control when nurses decide related to ethical problems. The NP and PC level score is calculated from the answers that the nurses give to these six expressions according to their order of importance. In the C section, the situations of experiencing similar ethical dilemmas are determined. The C section measured with liker-type scale determines the "Familiarity Score".

C) The Collection of the Data and Analysis

The data of the research were collected by conducting face to face interview with the nurses working in Adana City Training and Research Hospital in 2018. The data collection form and the NEDT form were responded in approximately 30 minutes. Descriptive statistical methods were used for the evaluation of the data by using the statistics package program. When evaluating NEDT form, frequency, percentage, mean and standard deviation values were used.

D) The Ethical Aspect of the Research

Before conducting the research, the essential official permissions were taken from the Ethics Committee and Hospital management and the verbal consents of the participants were obtained while conducting the survey.

E) The Originality and Limitations of the Research

Although there are studies in the literature regarding nursing and medical students, our research is unique as there is no study conducted on working nurses.

The limitations of the research result from that the research was only carried out in Adana City Training and Research Hospital.

IV. RESULTS

The average age of the participants is 34 (min: 23, max: 51), 98% of them are female, 2% are male, 5% are Health Vocational High School graduates, 36.3% have an associate degree, 55.7% have an undergraduate degree, 3% of them have master's degree. 25% of the participants work in Emergency Department, 25% in Intensive Care Unit, while 25% of them work in Surgical Unit, 88% of the participants are Clinical Nurses and 12% are chief nurses. 78.7% of the participants took the ethical course while 21.3% of them didn't take any medical ethics course.

The experience of 19.3% of the participants is less than 5 years, the experience of 36% of them is between 5-10 years, the experience of 18.3% of them is between 10-15 years and the experience of 26.3% of them is more than 15 years. 7.8% of the participants who didn't take ethics education have 0-5 years of experience, while 33.1% of them who took Medical Ethics education have 0-5 years of experience. 48.4% those who didn't take Medical Ethics course have at least 15 years of experience while 15.7% of those who took ethics course have at least 15 years of experience.

The mean NP score of all participants was calculated as 38.81±6.312 (min:23-max:59), while the mean PC score of them was detected as 22.25±3.986 (min:15-max:33). The mean NP score of the participants taking Medical Ethics course was calculated as 39.2 while the mean PC score of those who didn't take the ethics course was found as 37.2. The mean PC score of the participants taking Medical Ethics course was calculated as 21.79 while the mean PC score of those who didn't take ethics lesson was found as 23.9.

The familiarity scores of the nurses regarding similar situations were calculated as 15.42±3.193 (min:11-max:24). The familiarity mean score of the nurses who took medical ethics education was calculated as 15.11 while the score of those who didn't take ethics course was detected as 16.54.

V. DISCUSSION

The situations which push us towards the process of thinking and defending the rightfulness of our thought/behavior and cannot be decided upon easily are called ethical dilemma[8]. Developed with the purpose of assessing the ethical issues related to nursing, the NEDT enables the evaluation of the ethical dilemmas by assessing the scores of Nursing Principled Thinking and Practical Consideration. The NP score assesses the commitment to the ethical principles and the PC evaluates the value given to the environmental factors by the nurses.

The highest NP score to be obtained is 66. The mean NP score in the study is 38.81. The NP score of the nurses who took the ethics course before is 39.2 and the NP score of those who didn't take the ethics course before is 37.2. As the NP score of the ones who took the ethics course is 2 points higher

it possible to state that taking the ethics course creates a difference with regard to the commitment to the ethical values. Gül et al. found out that the nurses who took the ethics course had a higher principle thinking score compared to those who didn't take the ethics course [9].

The mean PC score was observed as 22.25 in the study. The mean PC score of the nurses who didn't take the ethics course before is 23.9 and the mean value of the nurses who took the ethics course is 21.79; the PC scores were 2.11 points higher than the scores of the ones who took the ethics course before. It was found in a similar study conducted by Torun that she mean NP scores of the master's students who took a course including the topics of medical ethics during their bachelor studies were 2 points higher than the nurses who didn't take any related course and their mean PC scores were found 4 points lower than those who didn't take the ethics courses [5]. More experienced nurses had a higher PC score, where the environmental factors such as the number of the patients, utilization of the sources and corporate policies are evaluated, compared to those who took the ethics courses, and this demonstrates that the development of the practical consideration could be related to experiences. It could be possible to explain the higher PC scores of those who didn't take the ethics course than the ones who took it with the effect of experiences.

The familiarity scores of the participants regarding similar situations were determined as 15.42. While the mean familiarity score of the nurses who took ethics education was detected as 15.11, the mean score of those who didn't take ethics education was found as 16.54. The difference between them which is 1.43 could be again explained with the experience.

VI. Conclusi̇on

As a result of the research, it was detected that the NP mean scores of the nurses taking courses on Medical Ethics subjects were 2 scores higher compared to those who didn't take ethics courses while their PC mean scores were 2.19 points lower. This situation suggests that taking Medical Ethics course raises awareness in terms of nursing principled thinking. It can be stated that ethical education and experience contribute to the development of practical and principle thinking. In order to develop practical and principal thinking in nurses, Medical Ethics education can be added as a compulsory course in the education process and the course can be supported with case samples and analyses.

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Investigation of the Medical Malpractice Tendency of Student Nurses

Serap Torun, Osman Bilgin, Ceylan Bıçkıcı

Abstract—**Introduction:** Medical malpractice can be defined as health workers neglecting the expected standard or intentionally not implementing it, doing it wrong and/or incomplete, not being able to implement the accurate practice due to personal or systemic reasons despite desiring to do it correctly and the condition that causes permanent or temporary damage to the patient as a result. If the training periods in which health workers improve their knowledge and skills are passed efficiently, they are expected to have a low rate of error in their professional lives. **Aim**: Aim of the study is to determine the medical malpractice tendencies of students studying in nursing department. **Material and Methods:** This descriptive research has been performed with 454 students who study in 3rd and 4th years in the Nursing Department of the Faculty of Health Sciences in a state university in normal and evening education and go out for clinical practice during the 2017-2018 academic year. The sample consisted of 454 students who agreed to participate in the study.

Ethics committee approval, the permission of the institution and the verbal consent of the participants were obtained. In collection of data, 'Personal Information Form' developed by the researchers and the Malpractice Tendency Scale (SMT) were used. The data were analyzed using SPSS 20 package program. 0.05 was used as the level of significance. **Results:** The Cronbach's alpha internal consistency coefficient of the scale was 0.94 and the total mean value of the scale was 211.69 ± 22.14. The mean age of the participants was $22,08 \pm 1,852$ years; 165 (36,4%) were male and 288 (63,6%) were female. Their mean General Point Average (GPA) was 2.65 ± 0.454 (min 1.03 - max 3.90). Students' average duration of self study per week was 2.89 ± 3.81 (min 0 - max 30) hours. The mean score (80.73) of the 4th year students in the sub-dimension of Drug and Transfusion Applications was significantly higher than the mean score (79.20) of 3rd year students ($p < 0.05$). The mean score (81.01) of the Drug and Transfusion Applications sub-dimension of those who willingly chose the profession was higher than the mean score (78.88) of those who chose the profession unwillingly. The mean average score (21.48) of Fallings sub-dimension of students who cared for 3 to 4 patients per day was lower than the mean score (22.41) of those who cared for 5 patients and over daily on average ($p < 0.05$). **Conclusion:** As a result of this study, it was concluded that malpractice tendency of nursing students was low, and an inverse relationship was found between the duration of education and malpractice tendency.

Keywords—Nursing student, medical malpractice, nursing, tendency, patient safety.

I. INTRODUCTION

MEDICAL malpractices can be defined as health workers neglecting the expected standard or intentionally not implementing it, doing it wrong and/or incomplete, not being able to implement the accurate practice due to personal or systemic reasons despite desiring to do it correctly and the condition that causes permanent or temporary damage to the patient as a result. According to

Saygın and Keklik, medical malpracticeswere grouped by Reason in 1990 for the first time as active and hidden errors and the effects of active errors immediately occur while hidden errors state the situations beyond the control of the health workers [1] The most common errors in the literature are medication errors [2],[3].

If the training periods in which health workers improve their knowledge and skills are spent efficiently, it is expected from them to have low rates of making a mistake in their professional lives. Curriculum programs to include subjects related to patient safety increases the awareness of the student nurses and ensures taking the necessary measures related to the subject. Almost all of the courses given in the nursing rudiments course, which were first introduced to the student in order to develop professional skills in the field of nursing, the subjects of patient safety on the basis of treatment steps are addressed. For example; the first treatment step, 'wash your hands', is a measure against infection. The second step, " introduce yourself to the patient " means communication and then "explain the treatment to the patient" means informing the patient. Such examples can be increased.

II. AIM

To determine the tendency for medical malpractise of nursing students.

III. RESEARCH METHOD

The research is descriptive.

A) The Sample and Location of the Research

The population of the study consisted of 580 students who were in the 3rd and 4th year in the nursing department of the Faculty of Health Sciences of Çukurova University in 2017-2018 academic year who started clinical applications while the sample consisted of 454 students who accepted to participate in the study.

The study was carried out in 2017-2018 academic year in Çukurova University Faculty of Health Sciences Nursing Department.

B) Data Collection Tools

During the collection of data, Personal Information Form which was developed by the researchers and Scale of Malpractice Tendency (SMT), which was proved to be valid and reliable by Özata and Altunkan who developed it, were used [3]. The scale consisted of 5 sub dimensions and 49 questions related to the activities of nurses. Responses to the expressions in the scale were graded in 5-point likert style.

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C) The Collection of the Data and Analysis

The research data were collected by the researchers between 1 November 2017 and 31 March 2018 by face to face interview method. The students who accepted to participate in the research were informed about the research and the information section in the first part of the personal data form was read. They were asked to answer the questions. On the scale, participants were asked to mark each statement according to their preferences. The options are in the range of 1 (never)-5.(always). The score range of the scale is between 49-245. The increase in total score is interpreted as a decrease in the tendency to make a medical malpractice. The collected data were analysed using SPSS 20 package program. While examining the differences between the groups, Independent t-test and One-Way ANOVA were used. In case of having significant differences in One-Way ANOVA, Tukey HSD analysis was used in cases where the variance of the groups were homogeneous and Tamhane's

analysis was used in cases where the variance of the groups were not homogeneous. 0.05 was used as the level of noted in case of p <0.05, and in the case of significance; a significant difference was p>0.05, it was noted that there was no significant difference.

D) The Ethical Aspect of the Research

In order to conduct the study, ethics committee approval, institution permission and verbal consent of the students were obtained. In addition, in the first part of the Personal Information Form, information were given saying that consent was given to participate in the study if the questions about the research were answered.

IV. RESULTS

The Cronbach alpha internal consistency coefficient of the scale was 0.94 and the total average value of the scale was found to be 211.69 ± 22.14 (Table I).

TABLE I
SCALE VALUES

	Number of expressions	Lower and Upper scores of the Study	Lower dimension total average score	±SD	Cronbach Alpha
SMT	49	1-245	211,69	22,14	0,94
Drug and transfusion administering	18	44-90	79,99	7,515	0,877
Hospital infections	12	27-60	52,14	6,32	0,869
Patient Monitoring and Material Safety	9	15-45	36,53	5,56	0,815
Falls	5	10-25	21,80	3,31	0,850
Communication	5	5-25	21,26	4,07	0,819

When the demographic characteristics of the participants were examined; the average age of the participants was $22,08 \pm 1,852$, 165 (36,4%) were male and 288 (63,6%) were female. The average GPA of the participants was $2,65 \pm 0,454$ (min 1.03 max 3.90). 219 participants (48.3%) are in their 3rd year and 234 (51.7%) are in their 4th year. 236 students (52.1%) stated that they chose this profession willingly. 53% of the participants live with their family. The average daily sleep time was $7,72 \pm 1,47$.

The average weekly hours worked by the participants was 2.89 ± 3.81 hours. The average number of applied courses taken by the students until the data collection time is $6,59 \pm 1,52$, and the number of clinical studies they studied is $11,68 \pm 4,40$. The students provide care for an average of 3.96 ± 2.05 patients daily.

There was no statistically significant difference between the average scores of Drug and Transfusion Applications, Hospital Infections, Patient Monitoring and Material Safety, Falls and Communication sub dimensions belonging to health workers in terms of gender (p> 0.05).

There was a statistically significant difference between the average scores of Drug and Transfusion Applications sub dimension belonging to students in terms of class variables (p <0.05). The average score of Drug and Transfusion Applications sub dimension belonging to 4th year nursing students (80,73) is significantly higher than the average score of Drug and Transfusion Applications sub dimension belonging to 3rd year nursing students (79,20). There were no statistically significant difference between the average scores of the Hospital Infections sub dimension in terms of class variables (p> 0.05). The average score of Patient Monitoring and Material Safety sub dimension belonging to

4th year nursing students (37,15) is significantly higher than the average score of Patient Monitoring and Material Safety sub dimension belonging to 3rd year nursing students (35,86) and has a statistical significance (p <0.05). There was a statistically significant difference between the average scores of the Falls sub dimension (p <0.05). The average score of Falls sub dimension belonging to 4th year nursing students (22,26) is significantly higher than the average score of Falls sub dimension belonging to 3rd year nursing students (21,31). The average score of Communication sub dimension belonging to 4th year nursing students (21,74) is significantly higher than the average score of Communication sub dimension belonging to 3rd year nursing students (20,74)(p<0,05).

There was a statistically significant difference between the average scores of all sub dimensions of nursing students except Communication in terms of their state of choosing the profession (p <0.05). The average score of Drug and Transfusion Applications sub dimension belonging to nursing students who have chosen the profession willingly (81,01) is significantly higher than the average score of Drug and Transfusion Applications sub dimension belonging to nursing students who have chosen the profession unwillingly (78,88).

The average score of Hospital Infections sub dimension belonging to students who have chosen the profession willingly (53,09) is significantly higher than the average score of this sub dimension belonging to students who have chosen the profession unwillingly (51,12)(p<0,05). The average score of Patient Monitoring and Material Safety sub dimension belonging to participants who have chosen the profession willingly (37,03) is significantly higher than that of belonging to students who have chosen the profession

unwillingly (35,98)(p<0,05). The average score of Falls sub dimension (22,19) is significantly higher than the average score of this sub dimension belonging to students who have chosen the profession unwillingly(p<0,05).

There was no statistically significant difference between the average scores of Drug and Transfusion Applications, Hospital Infections, Patient Monitoring and Material Safety and Communication sub dimensions in terms of daily average sleep time belonging to nursing students (p> 0.05). The average score of the Falls sub dimension of nursing students who sleep less than 4 hours daily on average (18,70) is significantly lower than the average score of the Falls sub dimension of nursing students who sleep 5-7 hours daily on average (22,12) and the average score of the Falls sub

dimension of nursing students who sleep at least 8 hours daily on average (21,73) (p<0,05).

There was no statistically significant difference between the average scores of Drug and Transfusion Applications, Hospital Infections, Patient Monitoring and Material Safety, Falls and Communication sub dimensions in terms of the state of satisfaction related to their lives as a student belonging to nursing students (p> 0.05).

There was no statistically significant difference between the average scores of Drug and Transfusion Applications, Hospital Infections, Patient Monitoring and Material Safety, Falls and Communication sub dimensions in terms of having a health problem belonging to nursing students (p> 0.05) (Table II).

TABLE II
EVALUATION OF THE RELATIONSHIPS BETWEEN THE SOCIO-DEMOGRAPHIC CHARACTERISTICS OF HEALTH WORKERS AND THE SMT SUB DIMENSION AVERAGE SCORES

	Descriptive properties	Drug and transfusion administering	Hospital Infection	Patient Monitoring and Material Safety	Falls	Communication
		Mean±SD	Mean ±SD	Mean ±SD	Mean ±SD	Mean ±SD
Cender	Male(n=165)	80,46±7,67	51,68±6,77	36,85±5,59	21,77±3,41	21,35±3,81
	Female(n=288)	79,72±7,42	52,41±6,03	36,34±5,55	21,82±3,27	21,21±4,23
	Critical Score	t=1,016	t=-1,176	t=0,953	t=-0,164	t=0,335
	P score	p=0,310	p=0,240	p=0,341	p=0,870	p=0,738
Class	3rd Class (n=219)	79,20±7,24	51,86±6,10	35,86±5,44	21,31±3,58	20,74±4,39
	4th Class(n=234)	80,73±7,70	52,41±6,51	37,15±5,62	22,26±2,98	21,74±3,71
	Critical Score	**t=-2,175**	t=-0,937	**t=-2,464**	**t=-3,090**	**t=-2,622**
	P score	**p=0,030***	p=0,349	**p=0,014***	**p=0,002***	**p=0,009***
Status of choosing the profession	voluntarily(n=236)	81,01±6,80	53,09±5,87	37,03±5,19	22,19±2,93	21,56±3,99
	compulsory (n=217)	78,88±8,09	51,12±6,63	35,98±5,91	21,39±3,65	20,94±4,16
	Critical Score	**t=3,023**	**t=3,352**	**t=2,018**	**t=2,556**	t=1,606
	P score	**p=0,003***	**p=0,001***	**p=0,044***	**p=0,011***	p=0,109
Daily average sleep time	Less than 4 hours (n=10)	80,20±6,53	49,10±6,44	33,90±8,09	18,70±4,88	19,50±6,08
	5-7 hours(n=164)	80,95±6,51	52,77±6,09	36,75±5,45	22,12±3,08	21,44±3,85
	8 and above (n=279)	79,42±8,04	51,89±6,41	36,49±5,53	21,73±3,34	21,22±4,13
	Critical Score	F=2,154	F=2,203	F=1,254	**F=5,309**	F=1,104
	P score	p=0,117	p=0,112	p=0,286	**p=0,005***	p=0,333
	group differences				**1-2 , 1-3**	
Are you satisfied with your student	dissatisfied (n=97)	78,84±8,73	51,00±6,83	35,68±6,21	21,32±3,86	20,94±4,30
	partially(n=271)	80,21±6,93	52,36±5,98	36,56±5,45	21,92±3,19	21,30±3,99
	satisfied (n=85)	80,58±7,75	52,76±6,64	37,39±5,07	21,99±3,03	21,52±4,15
	Critical Score	F=1,528	F=2,175	F=2,155	F=1,331	F=0,480
	P score	p=0,218	p=0,115	p=0,117	p=0,265	p=0,619
Do you have any healt problem?	Yes(n=50)	79,84±8,32	51,76±6,26	35,56±6,27	21,46±4,11	21,08±4,06
	No(n=403)	80,00±7,42	52,19±6,33	36,65±5,47	21,85±3,21	21,28±4,09
	Critical Score	t=-0,146	t=-0,458	t=-1,301	t=-0,776	t=-0,331
	P Score	p=0,884	p=0,647	p=0,194	p=0,438	p=0,741

There was no statistically significant difference between the average scores of Drug and Transfusion Applications, Hospital Infections, Patient Monitoring and Material Safety, Falls and Communication sub dimensions in terms of average weekly work hours, the number of applied courses taken and the number of clinics they have worked in belonging to nursing students (p> 0.05).

There was a statistically significant difference between the average scores of Falls sub dimension in terms of the daily average number of patients who had been provided with care belonging to nursing students (p <0.05). The average score of the Falls sub dimension of nursing students who provide care for 3-4 patients daily on average (21,48) is significantly lower than the average score of the Falls sub dimension of nursing

students who provide care for at least 5 patients daily on average (22,41).

There was a statistically significant difference between the average scores of Hospital Infections sub dimension in terms of the GPA belonging to nursing students (p <0.05). The average score of the Hospital Infections sub dimension of nursing students who have a GPA less than 1.99 (49,18) is significantly lower than the average score of the Hospital Infections sub dimension of nursing students who have a GPA between 2-2.99 (52,38) and the average score of the Hospital Infections sub dimension of nursing students who have a GPA of at least 3 (52,23) (p<0,05) (Table III).

V.DISCUSSION

In our study, the total scale score was 211.69 ± 22.14, the average scores of the Drug and Transfusion Applications (79,99) and Hospital Infections (52.14) sub dimensions were the highest while the average scores of Falls (21.80) and Communication (21.26) were the lowest. In the study of Mankan et al. with intern nurses, the average score of SMT was found to be 200.62 ± 33 [4]. In our study, it is possible to say that participants have lower tendencies for medical malpractice. In the study conducted by Andsoy et al. with nurses using the same scale, the highest average score belonging to nurses on sub dimensions was determined as infection prevention and communication, and the lowest average score was patient monitoring and material device safety [5]. When the results of our study are compared with the results of the study of Andsoy et al., it can be said that the professional experience reduces the possibility of making errors in communication sub dimension. Our participants being a student may cause them to be shy to communicate with the patient and, accordingly, may increase the likelihood of communication errors.

There was no statistically significant difference between the average scores of Drug and Transfusion Applications, Hospital Infections, Patient Monitoring and Material Safety, Falls and Communication sub dimensions belonging to health workers in terms of gender ($p > 0.05$). It is possible to say that both sexes provide care for their patient in the same way and they do not have malpractice tendencies.

The average score of the 4th grade students in the "Drug and Transfusion Applications" sub dimension in terms of the class variable was 80.73 while the average score of 3rd grade students was 79.20. In this sub dimension, it is seen that the tendencies to make medical malpractices of both grade's students are very low. Ayik et al. found in their study with nursing students that drug errors were the most common [6]. Similarly Bodur et al. found that the participants of the study named midwifery and nursing senior students' attitudes towards patient safety and medical malpractices made mistakes in drug applications most frequently [7]. The low tendency to make a medical malpractice in this sub dimension does not mean that there will be no error, but giving more importance on the subject during the education process will increase the awareness and attention. The average score of Patient Monitoring and Material Safety sub dimension (37,15) belonging to 4th grade students is significantly higher than the average score of this sub dimension belonging to 3rd grade students (35,86). The average score of Falls sub dimension belonging to 4th grade students is significantly higher in terms of the class variable while there is a statistically significant difference ($p < 0,05$). The average score of Communication sub dimension is also higher than 3rd grade students (21,74/20,74) and there is a statistical significance($p < 0,05$). It is possible to say that the tendency for medical malpractice belonging to 4th grade students is lower in the communication sub dimension because of the directly proportionate increase of the clinical experiences and the number of patients they provide care for. Choosing the profession willingly affects the professional life. As an example, in the study conducted by Gökdoğan et al., it was found that nurses believe that 83.1% of the errors occurring in the hospital are originated from communication [8]. The

lack of a statistically significant difference between the average scores of Hospital Infections sub dimension in terms of the class variable indicates that students from both grades are sufficiently sensible in this sub dimension and do not have malpractice tendencies.

There was a statistically significant difference between the average scores of all sub dimensions of nursing students except Communication in terms of their state of choosing the profession ($p < 0.05$).

The average scores of Drug and Transfusion Applications sub dimension (81,01), Hospital Infections sub dimension (53,09), Patient Monitoring and Material Safety sub dimension (37,03), Falls sub dimension (22,19) belonging to nursing students who have chosen the profession willingly are significantly higher than those of belonging to nursing students who have chosen the profession unwillingly ($p < 0,05$). This situation can be explained by the motivation of the students. Trying to work unwillingly can cause a decrease in the motivation and an increase in the possibility of making an error. This result is also influenced by the fact that those who chose the profession willingly will have a high motivation for learning and practice.

The average score of the Falls sub dimension of nursing students who sleep less than 4 hours daily on average (18,70) is significantly lower than the average score of the "Falls" sub dimension of nursing students who sleep 5-7 hours daily on average (22,12) and the average score of the Falls sub dimension of nursing students who sleep at least 8 hours daily on average (21,73) in terms of the average daily sleep duration belonging to nursing students($p < 0,05$). It is an undeniable fact that lack of sleep increases the possibility of making an error and it is possible to say that students who sleep less have a tendency to make medical malpractice.

We can say that the nursing students' state of satisfaction related to their lives as a student, of having any health problems, weekly average hours of study, numbers of applied courses they have taken and clinics they have worked in did not affect their tendency for medical malpractice ($p > 0.05$).

The average score of the Falls sub dimension of nursing students who provide care for 3-4 patients daily on average (21,48) is significantly lower than the average score of the Falls sub dimension of nursing students who provide care for at least for 5 patients daily on average (22,41) ($p < 0,05$). Experience increases as the number of patients increases. Thus, it becomes easier to take protective measures. Similarly, 4th grade students having a higher average score in this sub dimension also supports this result.

The average score of the Hospital Infections sub dimension of nursing students who have a GPA less than 1.99 (49,18) is significantly lower than the average score of the Hospital Infections sub dimension of nursing students who have a GPA between 2-2.99 (52,38) and the average score of the Hospital Infections sub dimension of nursing students who have a GPA of at least 3 (52,23). In the study of Işık et al. which evaluated medical malpractices according to nurses, they found that the inadequate level of knowledge belonging to nurses was thought to cause medication or dosing errors [9]. According to the results of our study, it is possible to say that the ranks success and the GPA indicated the accumulation of knowledge and willingness in the learning process. It is possible to say that students' knowledge on the

subject, who have a high GPA, enables preventive interventions to be carried out in a comfortable and deliberate manner and thus, the tendency for medical malpractices to be low.

VI. CONCLUSION

As a result of our study; it was found that the malpractice tendency of the nursing students was low. Malpractice tendency of 4th grade students was found to be lower than 3rd grade students, and it was detected that the students from both grades had no malpractice tendency in the Hospital Infections sub dimension. It has been found that the choosing the profession willingly decreases the malpractice tendency and the decrease of daily average sleeping duration increases the malpractice tendency. The nursing students' state of satisfaction related to their lives as a student, of having any health problems, weekly average hours of study, numbers of applied courses they have taken and clinics they have worked in did not affect their tendency for medical malpractice. The number of patients who have been provided with care reduces the malpractice tendency as it increases the experience. Likewise, it can be said that malpractice tendency decreases as the level of success increases. In order to reduce the tendency for medical malpractices, it may be recommended to focus on applied education to increase the experience of hospital and patient during the professional education of nursing students. In order to protect students from medical malpractices in their professional lives, it may be recommended to include elective courses for medical malpractice in the curriculum like the institution where the study was conducted.

TABLE III
EVALUATION OF THE RELATIONSHIPS BETWEEN PROFESSIONAL EDUCATION CHARACTERISTICS OF STUDENTS AND THE SMT SUB DIMENSION

	Descriptive properties	Drug and transfusion administering	Hospital Infection	Patient Monitoring and Material Safety	Falls	Communication
		Mean±SD	Mean ±SD	Mean ±SD	Mean ±SD	Mean ±SD
weekly average course work time	0-4 hours(n=368)	79,77±7,51	51,89±6,56	36,68±5,61	21,65±3,44	21,36±4,02
	5-9 hours (n=58)	79,90±8,02	52,72±5,06	35,53±5,59	22,24±2,73	20,72±4,53
	10 hours and above(n=27)	83,15±5,74	54,33±4,83	36,52±4,85	22,89±2,38	21,11±3,95
	Critical Score	F=2,566	F=2,168	F=1,065	F=2,336	F=0,619
	P Score	p=0,078	p=0,116	p=0,345	p=0,098	p=0,539
number of administered courses	1-5 Course(n=44)	79,55±9,73	51,41±7,55	35,98±6,04	21,93±3,75	21,75±3,17
	6-9 Course (n=398)	80,01±7,23	52,24±6,18	36,53±5,55	21,77±3,28	21,21±4,19
	10 Course and above (n=11)	80,91±8,14	51,73±6,05	38,73±3,47	22,64±3,04	21,09±3,24
	Critical Score	F=0,160	F=0,366	F=1,075	F=0,404	F=0,355
	P Score	p=0,852	p=0,694	p=0,342	p=0668	p=0,752
number of clinics by internship	1-5 Clinics(n=14)	78,43±11,85	51,93±9,43	37,86±5,70	21,43±5,32	21,5±3,25
	6-10 Clinics (n=214)	80,01±7,08	52,13±6,04	36,22±5,62	21,55±3,36	21,2±4,00
	11-15 Clinics (n=159)	79,85±7,25	51,72±6,62	36,21±5,59	21,78±3,30	20,92±4,40
	16-19 Clinics (n=23)	80,17±9,96	53,52±6,32	38,39±5,88	22,70±2,70	22,52±3,15
	20 Clinics and above (n=43)	80,79±7,64	53,12±5,31	37,77±4,72	22,79±2,35	22,07±3,82
	Critical Score	F=0,289	F=0,708	F=1,678	F=1,736	F=1,279
	P Score	p=0,885	p=0,587	p=0,154	p=0,141	p=0,277
number of patients care average daily	0-2 patients(n=116)	79,66±8,32	51,99±6,78	36,27±5,58	21,56±3,32	20,9±4,05
	3-4 patients(n=189)	79,43±6,96	51,61±6,07	36,22±5,48	21,48±3,60	21,02±4,38
	5 patients and above(n=148)	80,96±7,48	52,95±6,20	37,11±5,66	22,41±2,83	21,86±3,64
	Critical Score	F=1,882	F=1,902	F=1,237	**F=3,772**	F=2,405
	P Score	p=0,154	p=0,151	p=0,291	**p=0,024***	p=0,091
	group differences				**2-3**	
GPA	Less then 1,99 (n=28)	77,14±9,14	49,18±7,76	34,82±5,58	20,46±3,83	19,68±3,55
	Between 2 and 2,99 (n=311)	80,38±7,35	52,38±6,35	36,77±5,54	21,98±3,16	21,44±3,93
	3 and above(n=114)	79,62±7,44	52,23±5,65	36,27±5,58	21,66±3,54	21,15±4,53
	Critical Score	F=2,574	**F=3,355**	F=1,741	F=2,845	F=2,478
	P Score	p=0,077	**p=0,036***	p=0,177	p=0,059	p=0,085
	Group differences		**1-2 , 1-3**			

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The Causal Relationship between Perceived Social Support and Life Satisfaction through Hope, Resilience and Optimism

Pooneh Pilram, Karim Savari

Abstract—This study aimed to investigate the causal relationship between social support and life satisfaction through hope, resilience and optimism. The statistical population consisted of 3,000 derelict women under the guardianship of the City of Bavardelan, of which 200 were selected randomly. To study the variables of the research, the scales were used, including; perceived social support Zimit (1988), 'life satisfaction scale' (Diener, Emmons, Larsen & Griffin, 1985), 'hope scale' Snyder (1991), 'life orientation questionnaire' (Scheier & Carver, 1985) and 'resilience questionnaire' (Conner & Davidson, 2003). The methodology was correlation method. The statistical method used was Pearson correlation and path analysis (structural equations) using the SPSS and Amos statistical software. The results showed that social support is positively associated with life satisfaction, hope, optimism and there is a casual relationship between hope, optimism, resilience and the life satisfaction positively. Also, findings resulting from intermediary relationships have shown that there is an indirect positive relationship between the social support and the life satisfaction, in terms of hope, optimism, and resilience.

Keywords—Social support, life satisfaction, hope, optimism, resilience.

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An Overview of Asbestos Exposure in Urban Transformation Areas in Terms of Occupational Illness

Begüm Erten, Ebru Toy, Mert Tolon

Abstract—Occupational health and safety is the most important parameter (aspect) of working life. Preventing and minimizing damage to the employees from (resulting from) working environment constitutes the basis of occupational health and safety. In this sense, prevention of occupational accidents and occupational diseases can be achieved by creating culture, increasing awareness and disseminating information. In terms of occupational health and safety, there are many different sources of danger. In Turkey, urban transformation is becoming an increasing important process to improve the quality of urban life. But during the urban transformation process, demolition of buildings causes danger in terms of occupational illnesses. A great number of employees are exposed to occupational illnesses in their workplaces. In areas where urban transformation applied, the demolition and/or restoration works of the structures, which were built in 1980 and before, brought together the problem of asbestos exposure. It's accepted that high amounts of asbestos exposure for a long time in the demolition area not only will affect the employees of the demolition work but also the families of the employees, the inhabitants of the region and other living things in the same environment. For this reason, many legal regulations were carried out in Turkey and also in the world. The ultimate purpose of this study is to develop measures and control methods in the relevant legislation by carrying out a literature research and in situ evaluation of sample applications. Additionally, obtained findings are expected to be useful and relevant source for future academic studies concentrated on the development of occupational health and safety standards. Finally, the main objective of this study is to get attention on this area by providing information which might be example to the local authorities in Turkey.

Keywords—Asbestos exposure, legal regulations, occupational illnesses, urban transformation.

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Investigation of the Relationship between Exam Anxiety and Binge Eating Disorders in High School Students in the 15-19 Age Range

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Abstract—Eating disorders are mental health disorders as a result of disruption of the diet. This study was conducted to examine the relationship between exam stress and binge eating disorder in high school students. The study was conducted in March 2018 with 60 high school students (31 females, 29 males) aged 15-19 years. Personal characteristics and eating habits of individuals were measured by using a questionnaire prepared by the researcher. The binge eating disorder status of the individuals participating in the study was determined by the Bulimic Investigatory Test Edinburgh (BITE); test anxiety status was determined by Revised Exam Anxiety Scale. Statistical analysis of the data obtained from the study was done by IBM SPSS Statistics 23 program. While there was no significant relationship between the points obtained from the Bulimia Research Test Edinburgh and the consumption of something after the dinner (p > 0.05), there was a significant relationship with need to eat when stressed (p < 0.05). It is seen in 43.3% of individuals that there is no binge eating disorder, but abnormal eating behavior is observed. In 8.3% of the students, binge eating disorder (BED) was seen. No significant difference was found between male and female students in terms of BED (p > 0.05). It was determined that 60% of the participants who have BED had a medium level of anxiety and 40% had a high level of anxiety. A significant relationship was found between BITE and revised test anxiety (RTA) scale scores (p < 0.05). However, the relationship between the need for eating and the BMI and RTA scores were not significant (p > 0.05). In the study, the desired parameter was positive; there was a positive relationship between the BED and the test scores. In this period which is the starting time of dietary issues and different mental issues, for example, youthfulness, there should be regular trainings on the methods of coping with anxiety and on the principles of healthy nutrition in order to prevent health problems.

Keywords—Binge eating disorder, nutrition, obesity, test anxiety.

I. INTRODUCTION

NUTRITION is the process of providing or obtaining the food necessary for health and growth [1]. Human beings have to be fed to maintain their life, while nutrition problems affect humans' physiological and psychological functions, some factors in life may affect nutritional status of individuals. Eating disorders and obesity are diseases that have affected human life for various reasons since ancient times. These diseases disrupt the functionality of the human life and reduce the quality of life. Eating disorders are mainly mental health disorders in which the disruption of diet is the result [2]. It was thought that the reasons such as emulation to

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mannequins or not accepting their own physical and sexual development played a role in the period when these disorders first appeared. However, eating disorders are caused by many factors such as genetic, familial, psychological and sociocultural factors. Body mass index (BMI) is obtained by body weight (kg) divided by the square of height (m²). Overweight BMI classification: If it is between 25-29,9 kg/m² that is slightly overweight and if it is between 30-34,9 kg/m² that is I. class obesity, if it is between 35-39,9 kg/m² that is II. class obesity, if it is 40 kg/m² and above that is class III obesity [3]. When the skinfold thickness value is over 97th percentile in children and adolescents, it is considered to be obesity [4].

Although obesity is not included in the class of eating disorders in the DSM-V (Diagnostic and Statistical Manual of Mental Disorders) [5], it is usually caused by impaired eating behavior and can result in many negative consequences due to excessive fat accumulation in the body as a result of weight gain. Anthropometric measurements are used in the diagnosis of obesity. These are classified as;
- Body weight and height
- Calculation of body fat
- Calculation of lean body mass [3]

Psychopathologies accompanying obesity include major depression, bipolar disorder, and anxiety disorders. The risk and prevalence of depression in obese individuals is higher and the prognosis is worse [6].

Exam anxiety is a different kind of anxiety which causes the individual to have a mixed anxiety in the academic context. The levels of anxiety in adolescents may be affected by age, gender, occupations of parents, attitudes, academic success of the individual in previous years, level of education, number of siblings, socioeconomic level, individual's self-perception and personality traits [7].

This study was carried out to determine the relationship between BED and test anxiety among high school students aged 15-19 years. According to the DSM-V issued on 2013 [5], BED is considered as an eating disorder and there is limited number of studies in Turkey [5]. This study aims to draw attention to this issue.

II. MATERIAL AND METHOD

This research is an analytical and cross-sectional study conducted in March 2018 with a total of 60 students (31 female, 29 male) aged between 15 and 19 years, attending a high school in Istanbul to determine the relationship between

exam anxiety and BED. 31-item questionnaire was prepared using the literature. Survey questions include data about; personal information, food consumption habits, non-alcohol and water consumption status, physical activity habits, sleep duration. The questionnaire was filled with face to face interview method. During the study, the participants were informed about the aim and confidentiality of the study and informed consent form was obtained from the individuals.

The BMI was calculated by using the body weight and height values obtained by interrogation [BMI = Body weight (kg) / Square of length (m²)] and evaluated according to the World Health Organization classification [8].

The BED status of the students included in the study was evaluated by the BITE, developed by Henderson and Freeman [9]. BITE is a 33-item scale that measures the symptoms of bulimia neurosis or binge eating. There are two subscales, "Symptom scale" and "severity scale". The highest score determined from the test is 30. Evaluation;
• No BED and no abnormal eating behavior; 0-10 points,
• No BED but abnormal eating behavior; 11- 19 points,
• There is a BED: 20 or more points [9].

In this study, RTA Scale which was developed by Benson and El-Zahhar [10] to determine the students' exam anxiety levels was used. The RTA Scale consists of 20 items and 4 sub-scales: Tension, Somatic Symptoms, Anxiety, Unrelated Thoughts. The scale has a 4-way rating which are; (1) Never (2) Sometimes (3) Most of the time and (4) Always. In the scale, the score is not gradual and the high score from the scale shows that there is a high level of exam anxiety. The highest score is 80 and the lowest is 20. The scale gives a score for the sub-dimensions [10].

While evaluating the scores obtained from the RTA scale, normality analysis was applied on the test anxiety scores of the individuals and it was observed that the distribution was not normal (p < 0.05). Evaluation of the scores;
• Low anxiety, between 20 and 31 points
• Moderate anxiety between 32 and 43 points
• High anxiety between 44 and 80 points.

Statistical analysis of the data obtained from the study was done by IBM SPSS Statistics 23 program. Descriptive statistical methods (mean, standard deviation, frequency) and qualitative data were compared by using chi-square test and Fisher Exact chi-square test. Significance was evaluated at p < 0.05.

III. RESULTS

A total of 60 individuals, 31 (51.7%) female and 29 (48.3%) male, participated in the study. The age of the individuals ranged from 17 to 19, and 63.3% were 17, 35% were 21 and 1.7% were 19 years old. 21.7% of the individuals stated that they were doing physical activity and the difference between the physical habits of making physical activity according to gender was not statistically significant (p > 0.05). When the food consumption of the individuals after the dinner is examined; 90% of the individuals consumed various foods after dinner. It is seen that fresh/dry fruits consumption as 46.7%, foods such as chocolate, wafer, ice cream are consumed as 45%, crackers, biscuits, cakes, etc. are consumed more than other foods. When the need for food consumption during studying is examined; 36,7% of the participants stated that they need to consume food while 41,7% of them indicated that sometimes they need to consume food and 21,7% of them do not need food consumption. When the preferred foods are examined it is seen that; while 53.3% of individuals need to consume foods such as chocolate, wafers, ice cream, 40% of them prefer to eat crackers, biscuits, cakes, and 36.7% of them prefer fresh/dry fruits. Sleep duration of the participants in the study was 3.3% below 4 hours, 53.3% between 4-6 hours, 41.7% between 6-8 hours and 1.7% at more than 8 hours. When the body weight and height measurements of individuals were examined, the mean body weight was found to be 62.51 ± 10.58 kg and the mean height was 170.58 ± 8.14 cm. No significant difference was found between the BMI of female and male students (p > 0.05).

TABLE I
THE RELATIONSHIP BETWEEN BODY PERCEPTION AND BMI CLASSIFICATION OF INDIVIDUALS

BMI (kg/m²)	Body Perception									
	Weak		Normal		Overweight		Very Overweight		Total	
	n	%	n	%	n	%	n	%	n	%
Weak (<18.5)	3	60	2	40	0	0	0	0	5	8,3
Normal(18.5-24.9)	10	20,4	32	65,3	6	12,2	1	2	49	81,7
Overweight (25-29.9)	0	0	1	16,7	4	66,7	1	16,7	6	10

When the relationship between individuals' body perception and BMI classification is examined; 40% of the weak individuals are thinking that they're in normal weight, 20.4% of normal weight individuals are thinking they are weak (Table I). There was no significant correlation between BMI classification and meal skipping (p > 0,05). However, the relationship between BMI classification and eating status was found to be significant (p < 0.05)

TABLE II
THE RELATIONSHIP BETWEEN INDIVIDUALS' BMI CLASSIFICATION AND BITE SCORE ASSESSMENT

BMI Classification (kg/m²)	No BED		BE Behavior		Positive BED		p
	n	%	n	%	n	%	
Weak (<18.5)	3	60	2	40	0	0	
Normal (18.5-24.9)	25	51	19	38,8	5	10,2	0,283
Overweight (25-29.9)	1	16,7	5	83,3	0	0	

There was no significant relationship between BMI and BITE scores (p> 0.05).

In the individuals who participated in the study, 89.7% of those without BED, 92.3% of those with binge eating behavior and 80% of those with BED consume a snack after dinner. When questioned about the need to eat something while studying; 34.5% of those who do not have BED are in need of eating something while studying, 41.4% is sometimes, 24.1% did not have the answer. It was observed that 42.3% of the patients had eating needings, 34.6% of them felt the need to eat, and 23.1% of them did not feel the need for eating. When the situation of eating food when stressed; it was found that 13.8% of them ate when they were stressed, 41.4% of them ate when they were stressed, 44.8% of them started to eat. In those with binge eating behavior, it was found that 50% ate food while stressed, 26.9% ate food while stressed, while 23.1% did not eat while stressed. In those with BED; It was observed that 80% of the patients needed to eat while stressed and 20% did not eat while they were stressed. A significant relationship was not found between the points obtained from the Bulimia Research Test-Edinburgh and the consumption of something after the course (p>0.05), there was a significant relationship between the need to eat when stressed (p <0.05). 48.4% of the girls received a low anxiety score of 1-31, 38.7% received a moderate anxiety score of 32-43, and 12.9% received a high anxiety score of 44-80. 17.2% of the males received low anxiety score, 48.3% had moderate anxiety and 34.5% had a high anxiety score. A significant difference was found between the scores of female students and male students in terms of their scores of exam anxiety (p <0.05)

TABLE III
RELATIONSHIP OF BMI CLASSIFICATION AND EXAMINATION ANXIETY SCALE SCORES

	Test Anxiety Scores					
	1-31 Low anxiety		32-43 middle anxiety		44-80 High anxiety		p
BMI (kg/m²)	n	%	n	%	n	%	
Weak (<18.5)	1	20.0	3	60.0	1	20.0	
Normal (18.5-24.9)	18	36.7	21	42.9	10	20.4	0.489
Overweight (25-29.9)	1	16.7	2	33.3	3	50.0	

The relationship between the BMI values of the individuals and the RTA scores is given in Table 3. 20% of the weak individuals are low, 60% are moderate, and 20% are highly anxious. 36.7% of normal weight individuals were low, 42.9% were moderate, and 20.4% were highly anxious. While 16.7% of mild fat individuals have low, 33.3% have moderate, 50% have high anxiety. There was no significant relationship between BMI scores and RTA (p> 0.05)

TABLE IV
RELATIONSHIP BETWEEN BITE AND RTA SCALE SCORES

	Test Anxiety Scores					
	1-31 Low anxiety		2-43 middle anxiety		44-80 High anxiety		p
BITE Score Assessment	n	%	n	%	n	%	
No BED	13	44.8	14	48.3	2	6.9	
Positive BE Behavior, No BED	7	26.9	9	34.6	10	38.5	0.032
Positive BED	0	0.0	3	60.0	2	40.0	

When the relationship between BITE and exam anxiety scale scores of the participants were examined; 44.8% of patients without BED had low anxiety, 48.3% had moderate anxiety, and 6.9% had high anxiety levels; 26.9% of people with binge eating behavior have low, 34.6% have moderate, 38.5% have high level of anxiety and 60% of those with BED high anxiety level. A significant relationship was found between BITE and exam anxiety scale scores (p <0.05).

IV. DISCUSSION

It has been proved that physical activity is important for health. It was found that physically inactive was responsible for 27% of diabetes, 21-25% of some cancers and 30% of ischemic heart diseases [11]. In our study, 13 (21.7%) of the individuals performed physical activity while 47 (78.3%) did not have physical activity. The difference between physical activity habits and gender was not statistically significant (p> 0.05). The reason for the low frequency of physical activity can be shown as the reason of the lack of time for students to prepare for the exam. However, considering the importance of physical activity in terms of health; these students should be directed to activities that will protect their health and also help them to stress and increase their motivation. In a study about eating behaviors of high school students, the rate of eating something while studying was found to be 65.5% [12]. In another study, ready-to-eat food consumption rate was found to be 7.8% and 15.7% [13]. In our study; 36.7% of the subjects stated that they needed to consume nutrients while they were studying, 41.7% sometimes needed, and 21.7% stated that they did not need food consumption. When the preferred foods are examined; while 53.3% of individuals need to consume foods such as chocolate, wafers, ice cream, 40% of them prefer to eat crackers, biscuits, cakes, and 36.7% of them prefer fresh / dry fruits. There are many studies investigating the effect of stress on eating behavior. In a study, 29.9% of the students stated that they eat when they are stressed [14]. In our study, 35% of the participants indicated that they eat when they are stressed. While 53.3% of individuals consume foods such as chocolate, wafers and ice cream while they are stressed, 30% of them prefer nutrients such as crackers, biscuits, cakes. The relationship between BMI classification and stressful eating status was significant (p<0,05). Studies show that inadequate sleep, especially less than 6 hours of sleep, can lead to increased adipose tissue and weight gain [15]. In our study, 53.3% of the individuals were sleeping in the range of 4-6 hours, and 41.7% were sleeping in the range of 6-8 hours. The proportion of individuals who sleep less than 6 hours should be reduced in order to increase the concentration and success rate and decrease the risk of obesity. Body perception is the name given to how individuals perceive themselves. In a study, the relationship between BMI classification and body perception of the individuals who participated in the study was examined; Of the women who are overweight, 26.3% see themselves as overweight, 2.5% are obese, and 44.4% of the women with normal weight see themselves normal weight [8]. In our study, 40% of the weak individuals are in normal weight, 20.4% of normal weight

individuals are weak, 12.2% are overweight and 2% are overweight and 16.7% of overweight individuals normal, 16.7% also think they are very overweight. Although BED is considered to have just entered the diagnostic classification of the American Psychiatric Association, there are many studies investigating its frequency. In a study investigating the frequency of BED in university students, 23.1% of the students were found to have BED [2]. In another study, while 3,7% of individuals had BED, 96,3% did not have BED [8]. In our study; In 43.3% of individuals, there is no BED, but abnormal eating behavior is observed. Of these, 46.2% is female and 53.8% is male. 8,3% of the students have BED and 60% of them are female and 40% are male. No significant difference was found between male and female students in terms of BED (p> 0.05). In the literature, the information on BED is mostly accompanied by obesity. In a study, it was found that the rate of BED was 8% in obese individuals [16]. However, the relationship between BMI and BITE scores was not significant in our study (p> 0.05). It is thought that the majority of the sample is composed of normal weight individuals. Based on the assumption that eating status is one of the factors that make up the TYB in the stressful times, the need for eating and the BITE scores were compared in the course of dinner and during stressful times, and the results were found to support the literature in terms of stress [17,18]. While there was no significant relationship between the points obtained from the Bulimiya Research Test-Edinburgh and the consumption of something after the course (p> 0.05), there was a significant relationship with eating need (p <0.05). There are many studies conducted on students to determine the various dimensions of exam anxiety. In a study, it was revealed that male students had more delusional attitudes than female students in terms of exam anxiety and gender [19]. The results of our study are similar to this study. There was a significant difference between the scores of female students and male students on the exam anxiety scale, and male students were more anxious than girls (p <0.05). Exam anxiety may decrease nutrient intake in some individuals and increase appetite by increasing appetite in some individuals. In the literature, two cases in which the food intake decreased and the diagnosis turned to Anorexia nervosa due to test anxiety before the university exam was mentioned and it was found to be related to Anorexia nervosa with the anxiety of examination [20]. So in our study, the relation between BED and test anxiety was investigated and it was found that 26.9% of individuals with BE behavior had low, 34.6% had moderate, 38.5% had high anxiety level, and 60% of those with BED had moderate and 40% had high level of anxiety. The research was positive; A significant relationship was found between BITE and revised RTA scores (p<0.05). However, the relationship between the need for eating and the BMI and RTA scores were not significant (p> 0.05).

In the study, the desired parameter was positive; there was a positive relationship between the BED and the test scores. In this period which is the beginning age of eating disorders and various psychological problems such as adolescence, there should be regular trainings on the methods of coping with anxiety and on the principles of healthy nutrition in order to prevent health problems.

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Meal Consumption Frequency in Patients with Type 1 and Type 2 Diabetes

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Abstract—In diabetic individuals, the number of meals is important and long-term irregular food intake may cause hypoglycemia and hyperglycemia complications. The aim of this study was to determine the knowledge levels and consumption status of the patients with Type 1 and Type 2 diabetes. The study included a total of 40 individuals (24 males and 16 females) with diabetes in the province of Sanliurfa, Turkey. The questionnaire was used as the data collection method. The questionnaire was prepared in order to evaluate the frequency, knowledge levels, consumption status and biochemical findings (HbA1c [Hemoglobin A1c], fasting blood glucose) of individuals. It was determined that food preferences were differentiated after diagnosis by type of diabetes. The relationship between diabetes type and number of meals consumed was evaluated. Patients with Type 2 diabetes had higher BMI (Body Mass Index), fasting blood sugar and HbA1c values than patients with Type 1 diabetes. When the number of meals was examined, 50% of Type 1 diabetic patients consumed 6-8 meals, whereas 50% of patients with Type 2 diabetes consumed 4-6 meals (p = 0.001). In diabetic patients, blood findings, frequency of food consumption and BMI values vary according to type of diabetes. In the context of diabetes management and control of blood glucose levels, solutions should be studied on regulation of meal consumption.

Keywords—Blood sugar, diabetes, meal, snack.

I. Introduction

DIABETES mellitus (DM) is a metabolic disease characterized by hyperglycemia, caused by problems of insulin secretion, insulin effects, or both, as a result of genetic and environmental factors and lifestyle changes. After the diagnosis is made, optimal control of blood sugar, careful monitoring of hypertension and the use of antilipidemic drugs should be provided [1]. It can help to detect disease symptoms in patients, to recognize early symptoms, to control the disease and to prevent vascular complications [2]. In patients with Type II diabetes, the risk of coronary artery disease is 2-4 times higher than those without diabetes. 75% of diabetics die from cardiovascular diseases [3]. Many factors, such as the profile of hyperglycemia, timing and amount of food, the amount of carbohydrate in the meal, affect insulin secretion and glucagon secretion [4]. The amount and type of food as well as consumption times are of great importance. Consumption of recommended foods on time and in recommended amounts prevents hypoglycemia and hyperglycemia.

In diabetic patients adequate and balanced nutrition should be taken care of, targeted individual body weight should be reached, meals should not be skipped, the intake times of insulin

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or drug amounts should be observed and physical activity level should be increased [5]. Diabetes has become an increasingly important problem in the world. Therefore, it is the responsibility of all health workers in the diabetes treatment team to evaluate diabetes in all respects.

In our study, we aimed to evaluate the effect of diabetes on meal consumption numbers, meal information, purchasing preferences, BMI, fasting blood sugars, HbA1c values in diabetic people living in Sanliurfa, Turkey. It is thought that the information obtained will guide the trainings given to individuals with diabetes.

II. Material and Method

This research was conducted in April 2018 and planned to determine the nutritional knowledge, type of dietary intake and nutrient group consumption of the Type 1 and Type 2 diabetic patients in Sanliurfa, Turkey. The study included 10 individuals with Type 1 diabetes and 30 subjects with Type 2 diabetes on a voluntary basis. In the study; the questionnaire form which was prepared by the researcher was used to determine the level of knowledge about the snack consumption frequency of people with diabetes.

In the evaluation of the findings, SPSS 17.0 (Statistical Package for Social Sciences) program was used for statistical analysis. In the evaluation of the study data, descriptive statistical methods (mean, standard deviation), and student-t test were used for comparison of the quantitative data with normal distribution. Significance was evaluated at $p < 0.05$ level.

III. Results

It was found that the mean age of the participants was 41.25 ± 11.367; average weight was 75.82 ± 13.65 kg; average height was 170.02 ± 11.61 cm; mean fasting blood glucose was 165.95 ± 52.43 mg/dl; the mean of hemoglobin was 8.12 ± 1.55 and the BMI average was 26.52 ± 3.97 kg/m^2.

60% (n = 24) of the participants were male and 40% (n: 16) were female. It was determined that 30% of the participants used multiple insulin treatment, 8% insulin pump and 20% antidiabetic drug, 25% (n = 10) of the individuals had Type 1 diabetes and 75% (n = 30) had Type 2 diabetes.

55% of diabetics received nutritional counseling, 17.5% of those who received nutritional counseling received it twice a month or once every 3 months, 70% of the participants do not know the carbohydrate count. Table I shows the meal

information of diabetic patients. A significant proportion of diabetic patients were found to have consumed between 4-8 meals.

TABLE I
MEAL INFORMATION

Previously Informing about Snack Consumption	n	%
Yes	27	67.5
No	13	32.5
Person Providing Information About Snack Consumption	**n**	**%**
Doctor	7	17.5
Dietitian	16	50.0
Nurse	4	10.0
Qualification of Information	**n**	**%**
Yes	20	50.0
No	4	10.0
Partially	3	7.5
Number of Snacks	**n**	**%**
3-4	13	32.5
4-6	21	52.5
6-8	6	15.0
Reason To Consume Snacks	**n**	**%**
Doctor has mentioned that it is necessary	15	37.5
Not To Fall On Blood Sugar	14	35.0
For Saturation Feeling	11	17.5

It was determined that the number of meals consumed according to the type of diabetes was significantly different (p = 0.001). While 83.3% of patients with type 1 diabetes consumed 6-8 meals, 92.3% of Type 2 diabetic patients consumed 3-4 meals.

The mean fasting blood glucose value of Type 2 diabetic patients was significantly higher than the mean of Type 1 diabetic patients (p=0.008) (Table II). According to the type of diabetes, fasting blood glucose was differentiated. The mean fasting blood glucose of patients with type 2 diabetes was significantly higher than the mean of Type 1 diabetes patients.

TABLE II
COMPARISON OF FASTING BLOOD SUGAR AND DIABETES

Type of Diabetes	Number of Observations	Mean Fasting Blood Sugar	Std. Deviation	p
Type1 diabetes	10	129.10	39.156	**0.008**
Type2 diabetes	30	178.23	50.951	

TABLE III
COMPARISON OF BMI AND DIABETES TYPE

Type of Diabetes	n	Mean BKI	p
Tip 1 diabet	10	21.70 ± 3.22	
Tip 2 diabet	30	28.13 ± 2.68	0.00

The mean BMI of type 2 diabetic patients was significantly higher than the mean of Type 1 diabetic patients (Table III).

The number of meals consumed by type of diabetes was found to be different. While half of patients with type 1 diabetes consume between 6-8 meals, half of Type 2 diabetic patients consume between 4-6 meals (Table IV).

TABLE IV
COMPARISON OF DIABETES TYPES WITH DIABETES PATIENTS

			Type of Diabetes		Total
			Type 1 diabetes	Type 2 diabetes	
Number of consumed meals	3-4	n	1	12	13
		%	7.7	92.3	100.0
	4-6	n	4	17	21
		%	19.0	81.0	100.0
	6-8	n	5	**1**	**6**
		%	83.3	**16.7**	**100.0**
Total		n	10	**30**	**40**
		%	25.0	**75.0**	**100.0**
Chi-Square p value				**0.001**	

TABLE V
COMPARISON OF DIABETES TYPES OF DIABETIC PATIENTS WITH DIETARY LABEL INFORMATION

			Type of Diabetes		Total
			Type 1 diabetes	Type 2 diabetes	
Are Label Information Effective in Your Product Selection?	Yes	n	10	10	20
		%	50	50	100
	No	n	0	20	20
		%	0	100	100
Total		n	10	10	30
		%	25	25	75
Chi-Square p value				**0.002**	

In Table V, when comparing the diabetic products with the food label information, the comparison of type of diabetes with the effective and non-food products was done by chi-square test. When the results are examined, it is understood that product selection is effective according to the type of diabetes. Type 1 diabetes is effective in all patients and is effective on half of type 2 diabetic patients.

After the diagnosis of diabetes, food intake preferences were

different. It was observed that the preferences of people with type 1 diabetes did not change in those with type 2 diabetes (Table VI).

Hemoglobin differed according to the type of diabetes. The mean of hemoglobin of type 2 diabetic patients is significantly higher than that of type 1 diabetic patients (Table VII).

TABLE VI
COMPARISON OF TYPES OF DIABETES WITH BUYING PREFERENCES

			Type of Diabetes		Total
			Type 1 diabetes	Type 2 diabetes	
Have Diabetes Change the Preferences of Buying Food After Diagnosis?	Increase	n	7	5	12
		%	58.3	41.7	100
	Decrease	n	2	6	8
		%	25.0	75	100
	Unchange	n	1	19	20
		%	5.0	95	100
Total		n	10	10	30
		%	25	25	75
Chi-Square p value			0.003		

TABLE VII
COMPARISON OF HBA1C AND DIABETES TYPE IN DIABETES PATIENTS

Type of Diabetes	n	Mean HbA1c	T-test p value
Type 1 diabetes	10	7.19 ± 1.36	0.026
Type 2 diabetes	30	8.43 ± 1.50	

IV. DISCUSSION

Nutrition is the basic necessity for growth and healthy life starting from the womb to the end of life. In this study, the frequency of snack consumption of Type 1 and Type 2 diabetic individuals was determined and situations experienced in the results were investigated. It was determined that the number of meals consumed according to the type of diabetes varied. While 83.3% of patients with type 1 diabetes consumed 6-8 meals, 92.3% of Type 2 diabetic patients consumed 3-4 meals. Also, food preferences were differentiated after diagnosis according to type of diabetes (p = 0.003). When the consumption of snacks was evaluated, it was stated that the group using insulin consumed mid-morning snack more frequently (10%) and 90% of both groups consumed snack. In this study, 75% of the participants were Type 2 and 25% were Type 1 diabetic patients. Approximately half of individuals have diabetes related complications and are treated with insulin. In a study by Uchigata et al., 240 individuals who used OAD (oral antidiabetic) or insulin recorded their meal, contents and times of snack for 1 week. In the results of the study; it was determined that the most skipped meal in both groups was breakfast (8.6%) [6]. In this research, it was determined that the most skipped meals were lunch (36%). In a study by Mekary et al., the effects of eating frequency and snacking on the risk of type 2 diabetes were examined. During the follow-up period 1944 (total 29206) type 2 diabetes was diagnosed. It is stated that those who skip breakfast meals are at 21% higher risk of type 2 diabetes. Individuals consuming 1-2 meals per day were found to be at higher risk for type 2 diabetes than individuals consuming 3 meals a day [7].

In this study, 67.5% of the participants were informed by dietitians about the consumption of snack. A significant proportion of diabetic patients were found to have consumed between 4-8 meals. The majority of snack consumption is due to health problems. Frequent feeding delay hunger at the next meal, resulting in a more controlled and less nutrient intake. Therefore, when the right choices are made, the snack positively affects the blood glucose level [8]. In a study conducted by El Khoury et al. [9], 20 healthy male individuals consumed 5 different snacks (plain yogurt, plain yogurt and honey, strawberry yogurt, skimmed milk or orange juice) as a mid-morning snack. Nutrient intake was evaluated after 120 minutes. Blood glucose, serum insulin and subjective satiety were measured before and after meals. The pre-meal glucose response was diminished in a dose-dependent manner to increased protein and reduced sugar in the milk.

The ratio of protein to carbohydrate is reported to be negatively correlated with glucose before meal as it improves insulin action rather than increasing insulin concentration. Compared to orange juice, it has been reported that blood glucose is lower after a snack of dairy products. It has been found that skimmed milk with the lowest protein carbohydrate ratio among dairy products reduces glucose before and after meals without causing high insulin levels. No effect on appetite has been identified [9]. In this study, the most frequently preferred option of snacks is "fruit", "nuts" and "bread-cheese". In our study, half of the patients with Type 1 diabetes consume between 6-8 meals, while half of the patients with Type 2 diabetes consume between 4-6 meals. It is understood that food preferences are differentiated after diagnosis by type of diabetes. Type 1 diabetes has increased in a significant proportion of patients, while Type 2 diabetes has not changed.

Diabetes has become an increasingly important problem in the world. Therefore, it is the responsibility of all health workers in the diabetes treatment team to evaluate diabetes in all respects. Improving the quality of life of the patient during the entire treatment process is still a duty of the diabetes treatment team. Clinical use of scales such as DRPA (Diabetes Related Problematic Areas) is thought to be effective in the psychological approach and re-planning of treatment due to individual requirements. However, it is a fact that there is a need for more studies with large samples. In this study, the frequency of snack consumption was determined in Type 1 and Type 2 DM subjects and the conditions were investigated.

In the study, the following suggestions were made within the framework of the findings; Medical nutrition therapy, including lifestyle changes and healthy eating habits, which form the basis of the treatment of people with diabetes, should be lifelong applications. In this context, they can use energy-free sweeteners approved by FDA (Food and Drug Administration) in their beverages and desserts at home. Those who want to control weight, obese and diabetics may include sweeteners in their daily diet, provided that they do not exceed the maximum use doses specified for each sweetener. The use of low-calorie or non-caloric sweeteners can be used to limit dietary sugar consumption and calorie intake. Diabetics also can use because they do not increase their blood sugar. Although diabetic products sold in the market contain sweeteners instead of sugar, they also contain high amounts of fat, flour, etc. Due to their content calories may also be high. Therefore, individuals should be trained to change the perception of unlimited use of such products. It should be kept in mind that excessive consumption of sugar alcohols may cause gastrointestinal problems.

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Occupational Safety and Health (OSH) Compliance: The Final Approach

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Abstract—While ensuring OSH Compliance through laws, regulations and enforcement has helped to mitigate the level of exposure to hazards to as low as reasonably practicable (ALARP), inorder to ensure the safety and Health of the worker, the current Global approach of vision zero hazard has deemed it more essential for OSH practice in the Workplace to expand her scope beyond just the tailored practice of Safe work on Job tasks. In recent times, it's been discovered that several factors have contributed to accidents in the workplace which is most likely to be on the increase as a result of environmental factors such as Climate Change, Earthquakes, Floods, Hurricanes, Tsunamis' and even the increase of Kidnaps/insurgencies at from Militants and Terrorists. Recent studies from the American Meteorological Society show that workplace accidents and deaths have been traced to impact of storms, hurricanes and Tsnamis. The 2010 Copiapo Chilean mining accident, the 2018 Thai soccer boys stuck in a cave, the kidnap of construction expatriates and foreign aid workers by Boko -Haram Islamic terrorists and Militant Killing of Oil workers in Nigeria are all pointers that other external factors need to be considered as potential hazards to the Safety and Health of both the Employer and the Employee in the Workplace. An effective recommended approach would include the consideration, articulation and integration of these other external factors as potential hazards of Safe work practices by Safety consultants, professionals, scientists to ensure an achievable vision zero.

Keywords—Compliance, environmental hazards, vision zero, climate change.

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Evalution of GenoType® MTBDRplus Assay for Detection of Rifampicin Resistance in Multi Drug Resistance *Mycobacterium tuberculosis* Complex Strains

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Abstract—Resistance profiles of Mycobacterium tuberculosis strains and gene mutations causing resistance are being investigated throughout the world and mutation zones of strains are being researched on the country basis. In this study, 25 multidrug resistant (MDR) Mycobacterium tuberculosis clinical strains collected between January 2001-December 2011 were used and gene mutations causing rifampicin (RIF) resistance were investigated by GenoType® MTBDRplus and the results of resistance obtained by GenoType® MTBDRplus were compared with the results of BACTEC 460 TB system. There were 96% compliance between GenoType® MTBDRplus and BACTEC 460 TB system for the detection of RIF resistance. The most frequent mutation zone in MDR strains was rpoB S531L promotor zone (13 strains, 52%). The other rpoβ gene mutations were H526Y (3strains, 12%) and H526D (3 strains, 12%), while 5 strains had Δ2-Δ5 mutations (20%) in the wild type probes. There was no mutation only one strain (4%) by GenoType®MTBDRplus but it was found to be as resistant to rifampicin by the BACTEC 460 TB system. In conclusion, GenoType® MTBDRplus showed good compliance with the BACTEC 460 TB system in the detection of rifampicin resistance and it was thought that GenoType® MTBDRplus might be an effective and reliable test for the susceptibility testing of rifampicin in MDR-TB patients. Additionally, this technique also provided a significant advantage in terms of time..

Keywords—Tuberculosis, rifampicin, resistance, Genotype MTBDRplus, Mycobacterium, rpoB.

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