THE IMPACT OF THE PSYCHOLOGICAL CAPITAL DIMENSIONS ON
EMPLOYEE WELLBEING AND KNOWLEDGE SHARING THE CASE OF
KAFRELSHEIKH UNIVERSITY

Hossin, Ali Ahmed Abd Alkader Ahmed

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Dr. Ali Ahmed Abdel Kader Ahmed Hossin*

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This research is mainly concerned with describing and analyzing the relationship between the psychological capital dimensions and employee Wellbeing, as well as knowledge sharing. The key objectives of this research focus on developing the psychological capital dimensions, and improving employee Wellbeing and knowledge sharing of teaching staff members at Kafrelsheikh University, Egypt. To accomplish these objectives, a random stratified sample of 320 subjects was selected from the population of teaching staff members at Kafrelsheikh University. The research findings indicated that there are significant differences among teaching staff members’ attitudes towards the psychological capital dimensions according to their demographic characteristics. The findings also reveal that there is a significant relationship between the psychological capital dimensions (self- efficacy, optimism, hope, and resilience) and both employee Wellbeing and knowledge sharing. These results confirm the importance of the psychological capital dimensions to teaching staff members at Kafrelsheikh University to promote their wellbeing and knowledge sharing.

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Introduction

The concept of psychological capital, which emerged later than, and as an extension to, other types of capital, such as human capital and social capital, has its beginning in the late 1990’s when Martin Seligman, head of the American Psychologists Association, directed his colleagues to expand their research to include the study of achievement and human happiness (Foster & Lloyd, 2007:30). Seligman emphasized the necessity of encouraging and activating the study points of human strength and constructive feelings and working on its improvement to reach a level of excellence. Thus, Seligman’s interest was points of strength rather than points of weakness among human beings. The importance of psychological capital arises from the fact that it is an evaluation of an individual’s psychological capital capable of development; such as hope, optimism, proficiency and resilience. These reflect the role of this concept in motivating the human race to attain goals and have faith in its achievement (Luthans et al., 2007b: 3).

Today, educational, institutions seek to achieve quality and excellence in the educational process in order to maintain their existence and to compete with the challenges of the era of digital revolution and, digital knowledge. Therefore, it is necessary for these organizations to cope with this change by adopting strategies based on a system for knowledge management (Carpenter, Rudge, 2003; Nahapiet and Ghoshal, 1998; Spender and Grant, 1996). The success of educational
institutions in adopting knowledge systems is related to the success of that part pertinent to sharing this knowledge among individuals for whom it most benefits.

On the other hand, the human element represents the greatest element in the success of institutions; therefore, it is necessary to ensure that employees enjoy Wellbeing in their field of interest which qualifies them to work in an appropriate way. Recognition of the dimension of psychological capital is a must to guarantee improvement; in Wellbeing (Janes et al., 2010; Brown & Leigh, 1996 and Shuck et al., 2011), as well as sharing knowledge among university teaching staff members (Argote et al., 2003; Nahapiet & Ghoshal, 1998; McCrae and Costa, 1997; and Le Pine Delgado et al, 2011).

**Exploratory Study**

An exploratory study is used when a researcher is seeking insights into the general nature of a problem; the researcher wants to know which relevant variables need to be considered; and when a hypothesis is either vague, ill defined, or does not exist at all. It is also useful for establishing priorities among research questions and for learning about the practical problems of carrying out the research (Aaker et al., 2000).

The Exploratory Study in this case is based on deep individual interviews and deep group interviews with a limited sample from Kafrelsheikh University teaching staff members. The two types of interviews were carried out with 50 staff members. These interviews were directed to cover the extent to which the dimensions of psychological capital (self-efficacy, optimism, hope, and resilience), and the Wellbeing of staff members are present; in addition to the existence of the culture of knowledge sharing (exchanging knowledge) among university staff; and finally, university decision makers’ perceptions of the significance of developing psychological capital of dimensions among teaching staff members.

In the light of the different interviews in the pilot study, some deductions were made: for example, some have a desire to keep secret their knowledge so as to attain some advantage (such as promotion); or fear of losing authority and power as a result of knowledge sharing. Some teaching staff members who have the desire to share their knowledge with others expect to gain some benefits in return for participation or sharing. Therefore, a teaching staff member may not have the interest and desire to share their knowledge with others if they sense that they will not attain any benefit or some kind of compensation. Others desire not to conduct shared research work as a result of not counting these pieces of research as a whole for each author, according to the rules of the promotion committees.
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on one side and non-availability of local funds for funding these pieces of research on the other side.

In addition to the above mentioned points, some teaching staff members (particularly female members of staff) feel disappointed if their research receives a low assessment from promotion committees in Egypt. Finally, the difficulty of attaining knowledge and information because of decrease in funds allotted for scientific research and/or subscribing to Arab and foreign journals and participation in conferences outside the country and seminars’, training sessions and education at the university are not adequate for developing and enhancing the talents and potential of teaching staff members.

In the light of the exploratory study, and through reviewing the pertinent literature, it can be seen that there is a reduction in teaching staff member’s level of Wellbeing on one side and knowledge sharing levels on the other. It may indicate that one of the ways that can be used to improve the level of Wellbeing and knowledge sharing among teaching staff members is to improve their psychological capital dimensions. This concern necessitates the universities need for a research area to study and interpret teaching staff members’ attitudes towards psychological capital dimensions, identifying the most critical dimensions that can be improved to increase level of Wellbeing and knowledge sharing among teaching staff members.

Literature Review and Hypothesis Development

This part includes a discussion of what conclusions both local as well as international research has reached, according to concepts and terms pertinent to the research variables. This part also contains a brief idea for some studies relevant to the dimensions of psychological capital and its relationship to the Wellbeing of teaching staff members on one side and knowledge sharing on the other.

Dimensions of Psychological Capital

Description of psychological capital has appeared in brief in various works related to the fields of economics, investment and sociology Luthans et al. (2004: 46): This term emphasizes points of strength among individuals and reduces points of weakness, and highlights health and vitality instead of illnesses. This term is defined by Luthan et al. (2007a: 550) as “an individual’s positive evaluation for conditions and the possibility of success on the basis of perseverance and stimulating effort”. Luthans et al. (2007b: 3) view this term in a different way as an individual’s psychological capital state that is liable to development.
These terms encompass four components: (i) Self-efficacy: Having Self-efficacy to exert necessary effort for success in challenging missions, that is. “an individual’s Self-efficacy in one’s capacities and potentialities to motivate/stimulate perceptive motives (cognitive) to execute a particular mission successfully within a specific content (Stjkovic & Luthans, 1998: 66); (ii) Optimism: Creating outstanding positive characteristics concerning achieving success at present and in the future (Seligman, 1998); (iv) Hope: Perseverance and endeavor to attain goals, and redirecting paths towards achieving these objectives when necessary for the sake of achieving success (Snyder et al 1996); (iv) Resilience: Tolerance and returning to one’s normal state in case of exposure to problems and frustrating situations when seeking to attain goals. Bandura (1997: 3) argues that self-efficacy leads to too much resilience towards problems and distress, whereas Snyder (2000: 39) contends that the high standard of hope may lead to too much self-efficacy concerning specific missions. As a result, this paves the way for an individual’s swift change after a temporary state of despair (resilience).

The relationship between psychological capital and employees’ Wellbeing

Diener (2000: 34) points out that the individual’s Wellbeing exceeds their salary since it has been defined as “processes that individuals employ to evaluate their lives whether these evaluations are perceptive (cognitive) or emotional (effective)”. The emotional (effective) component refers to a person’s feelings and emotions and mood (Diener, 1994), whereas the cognitive dimension (perceptive) points to the extent of an individual’s satisfaction about achieving their ambitions (Campbell et al., 1976). Stone et al. (2010) state that the perceptive dimension refers to “the general good state of an individual”, whereas the emotional (affective) component indicates an individual’s Wellbeing (entertainment). The Wellbeing of an individual is usually derived from a person’s perceptions (Cummins et al., 2003; Dolan and White, 2007). There are numerous elements which are used for measuring these perceptions.

Many studies used the emotional effective component to measure a person’s Wellbeing. For instance, Easterlin (1974) used a questionnaire asking individuals to answer the following question: In general, to some extent are you happy-very happy, happy to some extent - not happy? Similarly, the general social questionnaire of the United States requires individuals to respond to the following question: “Taking into consideration all matters, how do you see the situations today? Can you say that you are very happy, or happy to some extent, or not very happy”
The study carried out by Janes is one of the few research works that dealt with the relationship between psychological capital and employees’ Wellbeing (Janes et al., 2010). The study’s findings indicate that psychological capital directly influences the employees’ Wellbeing, in addition to its capacity in interpreting the differences in measuring employees’ Wellbeing over time. In addition, Siu et al., (2014) revealed that psychological capital directly impacts on the employees’ Wellbeing (both job satisfaction and stress symptoms) fully mediated the association between psychological capital and turnover intention. Moreover, Siu, Oi Ling. (2013) confirmed that psychological capital had a significant positive relationship with participants’ work Wellbeing (higher levels of job satisfaction and physical/psychological Wellbeing).

Therefore, it is proposed that, in higher education sector in Egypt: There is an impact of the psychological Capital on employees’ Wellbeing.

The relationship between psychological capital and knowledge sharing

The concept of knowledge sharing is considered as one of the most
philosophical and intellectual concepts which has received wide attention on the part of researchers and practitioners of knowledge management, who specifically work to develop and improve organizations performance in a world characterized by speedy changes and critical challenges. Knowledge sharing is known as a process to transferring explicit or implicit knowledge to other individuals through communications which take place among them (Al-Taher and Mansour, 2009). Therefore, sharing knowledge is a significant process for reinforcing and supporting an organization’s innovation and it is also very important for supporting and enhancing an organization’s performance and developing explicit and implicit knowledge. This is achieved either through knowledge exchange, which focuses on explicit knowledge sharing using communication among individuals, or through socialization which facilitates implicit knowledge sharing. This process makes it easy to create new implicit knowledge among consultants.

Cooke (2003) indicates that knowledge transfer is the first step in knowledge sharing. Transferring knowledge means communicating proper knowledge to proper persons in appropriate time and with an adequate form and with appropriate cost. Zmud (2004) sees that one of the most prominent reasons for focusing on knowledge sharing is that the process of generating knowledge on its own does not lead to outstanding performance for an organization if knowledge is not shared with others; and enabling them of its usage without costing the organization exorbitant amounts as a result of knowledge sharing (Earal, 1998).

In 2002, Marquardt indicated that knowledge can be shared within organizations either intentionally or unintentionally. The intended way is that the sharing process of knowledge is done intentionally inside the organization through programmed individual communication or through written techniques such as notes, reports, periodicals and different types of internal printouts. In addition, knowledge is shared intentionally through use of videos, sound tapes, holding conferences, workshops and seminars, counseling programs, and training programs. The unintended form of knowledge sharing inside an organization includes using informal networks, stories, myths and the like (Marquardt, 2002).

In this regard, Abdullah, Nor Liza, et al, (2011) pointed out that to enhance knowledge sharing among academicians, the academic organizations should fulfill relational psychological contract expectations by constantly reviewing the needs of the academicians to enhance their expertise and skills. Besides, Digman (1990); McCrae and Costa (1997) and Le Pine and Van Dyne (2001) believe that psychological capital is one of the most significant causes in individuals’ ability to create new ideas...
and pioneer values which increase their desire to satisfactorily accept other individuals’ points of view and search for new opportunities for learning, and participate in knowledge exchange. Additionally, Szulanski (2000) found that one of the causes of weakness in transforming the prevalent organizational culture is knowledge transfer and its inability to end conflicts within an organization, since conflict reduces the effectiveness of knowledge transfer projects.

Chi-Min & Tso-Jen, (2013) examined the relationship between psychological capital and knowledge sharing, revealing the nature of psychological capital and its role in linking shared leadership and knowledge sharing. The study’s findings point out that shared leadership attempts to improve employees’ psychological capital and knowledge sharing. It was seen that psychological capital leads to improved employees knowledge sharing. Additionally, Lin and Lee (2004) reported that manager’s positive, optimistic attitude to knowledge had a positive impact on their knowledge integration and knowledge sharing (Lin and Lee, 2004). In the same context, Delgado et al (2011) found that the construct of psychological capital has greater potential to explain knowledge sharing behavior than its four separate components (Delgado et al, 2011). Moreover, (Kessel, Maura, et al, 2012) proved that psychological safety directly impacts on the employees knowledge sharing; knowledge sharing fully mediated the association between psychological safety and creativity.

Therefore, it is proposed that, in higher education sector in Egypt: There is an impact of the psychological capital on knowledge sharing of teaching staff members in universities.

The researcher found a clear scarcity of research work that deals with the relationship between psychological capital and employees Wellbeing as well as knowledge sharing. The researcher seeks to introduce an applicable model to improve employees Wellbeing on one side and knowledge sharing on the other, through improving psychological capital. The present study is very important especially in the field of higher education because of the significance of teaching staff members’ Wellbeing on one hand, knowledge sharing and knowledge exchange in the other, and its reflection on the country’s progress. This research differs from previous studies in three ways. Firstly, this study does not just demonstrate the impact of psychological capital dimensions on employees Wellbeing, but also reveals how the psychological capital dimensions influence knowledge sharing among universities teaching staff members. Secondly, this study contributes to
understanding of the current situation in Egyptian universities, and it reveals the extent of understanding regarding the adoption of psychological capital by Egyptian universities. Finally, before analyzing the relationship between study variables, this study explores whether there is a difference among teaching staff members attitudes toward psychological capital according to gender and faculty in which one works or not.

**Research Problem & Questions:**

To fill this gap, this research tried to answer the following study questions:

* What are the attitudes of university teaching staff members towards the dimensions of psychological capital (self-efficacy, optimism, hope and resilience)? Is there a difference among teaching staff members attitudes toward psychological capital according to gender and faculty in which they work?

* Is there a relationship between psychological capital's dimensions (self-efficacy, optimism, hope and resilience) and Wellbeing level of university teaching staff members? What are the most significant dimensions of which universities can make use in improving teaching staff members Wellbeing as well as knowledge sharing among members?

* Can Egyptian universities develop psychological capital dimensions for their teaching staff members so as to achieve higher degrees of knowledge sharing and improving Wellbeing levels among members?

**Objectives of the research:**

The present research seeks to achieve the following objectives:

* Investigating differences among the attitudes of teaching staff members according to gender, and the faculty in which they work towards psychological capital dimensions

* Identifying the relationship between psychological capital dimensions and employees Wellbeing among universities teaching staff members.

* Identifying the relationship between psychological capital dimensions and knowledge sharing among universities teaching staff members.

* Identifying the best methods to be used for developing psychological capital dimensions in order to improve wellbeing and knowledge sharing among universities teaching staff members.

Figure 1 shows the conceptual model with the hypothesized linkages between the constructs. These linkages deal with three sets of hypotheses:

H1: There are no significant differences among the attitudes of teaching staff members according to gender, and the faculty in which they work
Figure 1 the Conceptual Model

H2: There is no statistical significant relationship between psychological capital dimensions (self-efficacy, optimism, hope and resilience) and level of Wellbeing in university teaching staff members.

H3: There is no statistical significant relationship between psychological capital dimensions (self-efficacy, optimism, hope and resilience) and knowledge sharing among university teaching staff members.

Methodology

The population of the present study consists of teaching staff members in Egyptian universities. This research: is focusing on Kafrelsheikh University staff members teaching only, Appendix A shows the population of the study represented in Kafrelsheikh University teaching staff members which comprises of 1020 subjects in the academic year 2012/2013. The faculty of pharmacy is excluded since it has only five teaching staff members: a professor and four demonstrators. The sample which calculated 279 subjects was determined by using the following equation (Yomaxana, 1967).

\[
M_e = \frac{Z^2 H(1-H)N}{Z^2 H(1-H + Ne^2)}
\]

The study population is composed of groups of classes which makes
it non-homogenous according to subjects’ characteristics. The study’s population is divided into classes on condition that the subjects of each class are a homogenous one, whereas the subjects in each class are different from the other classes. Therefore, the procedures of using simple stratified random samples to get the sample which can be carried out on different stages (according to faculties then position classification) as shown in Appendix B. The number of distribution lists is increased to 320 lists with the intent of achieving high rates of respondents.

This research relied on a group of secondary data necessary for achieving the aims of the study. The data is related to the population of teaching staff members at Kafrelsheikh University and the literature which dealt with topics pertinent to this study’s issue. To obtain the secondary data, the researcher utilized different sources, such Arab and foreign reference books, journals, periodicals, published and unpublished research work related to the field of the study. Statistics and reports available in the university’s website is also employed. In addition to the secondary data which helped in formulating the research’s problem and questions, stating the hypotheses, identifying the basic features of the research’s population, the elementary data was collected through using questionnaires given to Kafrelsheikh teaching staff members.

**Research Instrument Development—Measures**

Three key variables are of particular concern to this empirical study including; (i) Psychological capital dimensions as independent variables. The researcher relied on the previous studies (Mohamed, 2012; Avey et al., 2010; Luthans et al., 2007; Wagnild & Young, 1993; Parker, 1998), these variables are represented in eight items measuring the four dimensions (self-efficacy, optimism, hope, and resilience), two items are assigned for each dimension. (ii) Employees’ Well-Being as a dependent variable which developed and tested by (Diener, 2000; Stigliz et al., 2010). These variables are represented in seven items which measure seven dimensions as follows: income, health, education, institution/organization, resources availability, security and satisfaction, (iii) Knowledge sharing as a dependent variable which developed theoretically and empirically by (Yoo et al., 2002; and Chennamaneni, 2006) and represented in Nine Items.

The preliminary questionnaire was tested through 28 teaching staff members who already are working in Kafrelsheikh University. In addition, the researcher made some adaptation, omissions, and additions which conform to the environment of Egyptian universities. All items have been measured by Likert Scale which consists of five degrees for a complete agreement and a complete disagreement. 300 carefully completed
questionnaire lists are collected with percentage 93% (total distributed lists are 320). The methodology of data manipulation in this study depends on using some advanced techniques of analysis available in the SPSS statistical package of data analysis. This package is used taking into account the nature of, techniques, study variables, numbers measurement techniques and type of samples, on one hand, purposes of analysis, and hypotheses testing on the other hand.

**Reliability of measures used in the field study**

Coefficient Alpha technique is considered one of the most common methods used in estimating measures reliability. It enjoys a high degree of accuracy in measuring the degree of consistency of the multiple measures used. Before performing the analysis, it is decided to exclude any variable which has a total item correlation coefficient less than 0.30 compared with other variables in the same measure (Edris, 2007, p. 400). As shown in Table (1), after examining items total correlation coefficients for each sub-variable of the study variables used in measuring the basic measures separately. One sub-variable is only excluded pertinent to knowledge sharing because of the existence of an item total correlation coefficient between this, variable and the rest of variables relevant to knowledge sharing in the same measures less than 0.30. The results of estimating reliability also showed that Alpha coefficient for all measures ranged from 0.733 to 0.854. Alpha coefficients reached also reflect the high degree of reliability of the measures used in humanities and marketing researches since the accepted level is 0.60 according to humanities researches (Nunnally, 1978, p.229-230).

Table 1 Internal Consistency of Measures

<table>
<thead>
<tr>
<th>Content of measures used in the study</th>
<th>Variable numbers</th>
<th>Alpha coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy</td>
<td>2</td>
<td>0.774</td>
</tr>
<tr>
<td>Optimism</td>
<td>2</td>
<td>0.843</td>
</tr>
<tr>
<td>Resilience</td>
<td>2</td>
<td>0.851</td>
</tr>
<tr>
<td>Hope</td>
<td>2</td>
<td>0.746</td>
</tr>
<tr>
<td>Total measures of psychological Capital dimensions</td>
<td>8</td>
<td>0.775</td>
</tr>
<tr>
<td>Employees’ Well-Being</td>
<td>7</td>
<td>0.733</td>
</tr>
<tr>
<td>Knowledge sharing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First trial</td>
<td>9</td>
<td>0.836</td>
</tr>
<tr>
<td>Second trial</td>
<td>8</td>
<td>0.853</td>
</tr>
</tbody>
</table>
Validity of measures used in the field study

To estimate the validity of the measures of this study, the first technique is content validity through carrying out some procedures to achieve a higher degree of content validation. This research made a broad survey of published Arab and Foreign studies which are relevant to these study variables on which the concepts, definitions, and the specific variables are founded. The questionnaire list is also presented to a group of teaching staff members and teaching assistants in the department of business administration, Kafrelsheikh University.

It is also decided to employ an exploratory Factor Analysis Technique since it is beneficial in suggesting the real dimensions of the measure under study, in addition to its ability to reduce data through excluding a measure’s contents which have less loading factors from those decided by this research or those which are loaded on more than one extracted factors. The factor analysis technique is applied on the measure of psychological capital dimensions and the research relied on principal components technique for extracting factors on condition that Eigen value should not be less than one. The research also depended on Varimax rotating technique on condition that the loading factor should not be less than 0.50 without loading any variable on more than one factor.
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| I feel confident in representing my faculty in meetings that take place with the university administration | 0.765 | -0.241 | 0.266 | -0.270 |
| I feel confident whenever I assist my setting the goals of my faculty | 0.744 | -0.246 | 0.277 | -0.355 |
| I view myself now as a very successful person at work. | -0.243 | 0.734 | -0.361 | 0.144 |
| If I find myself confronting an obstacle at work I think of many outlets | -0.223 | 0.755 | -0.352 | 0.343 |
| If I find an obstacle at work, and I have a problem which can be evaded; I more to another target. | -0.335 | 0.354 | 0.725 | -0.145 |
| I usually achieve things that require exerting an effort without hesitation | -0.458 | 0.478 | 0.722 | -0.222 |
| I always look forward to the illuminating part of my job. | 0.354 | -0.142 | -0.250 | 0.712 |
| When matters become obscure to me I usually expect the best. | 0.234 | -0.224 | -0.274 | 0.502 |

% of Variance
31.525
20.724
16.123
14.722

Cumulative %
31.525
52.249
68.372
83.940

The results of factor analysis indicated in Table (2) that eight variables represent psychological capital dimensions extracted from estimating reliability are loaded on four factors only without change since the loading factors related to these factors are 0.5 or more (Hair et al., 1998). The extracted factors from the four original variables which include 8 variables in interpreting about 83% of total variance in the original variables subjected to analysis as shown in Table(2). The extracted factors from the four original variables are the extracted factor no. (1) Self- efficacy variables 1, 2, the extracted factor no. (2) (Optimism) variables 3, 4 and the extracted factor no. (3) (Resilience): variables 5, 6 and the extracted variable no. 4. (Hope) variables 7, 8.

Results and Discussion for structural model

This part presents a discussion of the results of analyzing the data of the field study that depended on directed questionnaire to teaching staff members.
Differences among university teaching staff members towards psychological capital dimensions according to their gender and the faculty in which one works

This part deals with discussing the findings of the statistical analysis which aims at finding out the extent of differences among university teaching staff members attitudes towards psychological capital according to gender differences and the faculty in which one works as a whole as well as separately towards each dimension of psychological capital namely, self- efficacy, optimism, hope and resilience. In this concern, the researcher employed two statistical techniques: first, descriptive statistics using both the mean and standard deviation in addition to t-test for independent samples for the demographic variable related to gender (male-female) and second one way ANOVA for the faculty in which the teaching staff member works. The results of using these two techniques are as follows:

University teaching staff members’ attitudes towards psychological capital according to gender

Using the descriptive statistics technique the mean and standard deviation, besides, the t-test for two independent samples, the results are shown in Table (3).The results in Table (3) indicate that there is a significant difference among university teaching staff members’ attitudes towards psychological capital dimensions (self-efficacy, optimism, hope and resilience) according to gender differences. The results in Table (3) also show statistical significant differences among university teaching staff members’ attitudes towards psychological capital dimensions since the research results revealed that the difference between male and female regarding psychological capital dimensions reported (self-efficacy, 8.718; optimism, -5.194; hope, -9.151 and resilience, 8.631).

Referring to the previous table, it is clear that there is a significant difference among university teaching staff members’ attitudes towards psychological capital dimensions (self-efficacy, optimism, hope and resilience) according to gender differences, where t is significant (P = 0.001) with regard to the psychological capital dimensions (self-efficacy, optimism, hope and resilience).
Table 3 One-Sample Test for all Psy Dimensions Among Staff according to gender

<table>
<thead>
<tr>
<th>Psychological Capital Dimensions</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t</td>
<td>df</td>
</tr>
<tr>
<td>self-efficacy</td>
<td>8.718</td>
<td>299</td>
</tr>
<tr>
<td>Optimism.</td>
<td>5.191</td>
<td>299</td>
</tr>
<tr>
<td>Hope</td>
<td>-</td>
<td>299</td>
</tr>
<tr>
<td>Resilience</td>
<td>9.151</td>
<td>299</td>
</tr>
</tbody>
</table>

University teaching staff members’ attitudes towards psychological capital dimensions according to the faculty in which they work

Table (4) indicates the results of analyzing the variance among the attitudes of university teaching staff members towards psychological capital according to differences in the faculties in which they work towards each dimension (self-efficacy, optimism, hope and resilience). The results show that there is a significant difference among university teaching staff members’ attitudes towards psychological capital dimensions (self-efficacy, optimism, hope and resilience) according to differences in the faculties in which they work. Referring to table 4, it is clear that there is a significant difference among university teaching staff members’ attitudes towards psychological capital dimensions (self-efficacy, optimism, hope and resilience) according to differences in the faculties in which they work, where F-value is significant (P = 0.01) with regard to the psychological capital dimensions (self-efficacy, optimism, hope and resilience). In the light of the results of the previous analysis and the findings of using F-ratio pd the t-test, the null hypothesis is rejected as follows, **there are significant differences among university teaching staff members attitudes towards psychological capital dimension individually (self-efficacy, optimism, hope, and resilience) according to gender differences as well as the places where they work.**
Table 4 Respondents' attitudes towards Psy dimensions according to differences in the faculties

<table>
<thead>
<tr>
<th>Psychological Capital Dimensions</th>
<th>Variation source</th>
<th>Sum of squares</th>
<th>Degree of freedom</th>
<th>Mean square</th>
<th>F-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy</td>
<td>Among groups</td>
<td>635.433</td>
<td>9</td>
<td>70.603</td>
<td>82.87</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>247.274</td>
<td>290</td>
<td>0.852</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>882.707</td>
<td>299</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optimism</td>
<td>Among groups</td>
<td>585.346</td>
<td>9</td>
<td>65.038</td>
<td>53.310</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>354.023</td>
<td>290</td>
<td>1.220</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>939.370</td>
<td>299</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hope</td>
<td>Among groups</td>
<td>812.784</td>
<td>9</td>
<td>90.309</td>
<td>145.192</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>180.381</td>
<td>299</td>
<td>0.622</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>993.165</td>
<td>299</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resilience</td>
<td>Among groups</td>
<td>535.806</td>
<td>9</td>
<td>59.534</td>
<td>62.274</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>277.406</td>
<td>290</td>
<td>0.956</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>813.212</td>
<td>299</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The relationship between psychological capital dimensions and employees’ Well-Being

Regression Analysis Technique and Multiple Regression Analysis are used to study the relationship between psychological capital dimensions as independent variables and members’ Well-Being as a dependent variable. The results presented in table (5) point out that there is a statistical significant relationship between the dimensions of psychological capital of teaching staff members as a whole and members’ Well-Being. The relationship is 0.812 according to correlation coefficient in the model R, namely, it is a very strong relationship. The dimensions of psychological capital of teaching staff members as a whole can be interpreted as about 0.659 (according to R²) of the changes in Well-Being of the members.

Table 5 Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.812(a)</td>
<td>.659</td>
<td>.649</td>
<td>.503</td>
</tr>
</tbody>
</table>

Note: a Predictors: (constant), Self-efficacy, Optimism, Hope, and Resilience

Results from Table (6) show that the ratio of the two mean squares (F) was 126.025(p < 0.001). Since the observed significance level was less than 0.001, the eight variables influence staff members’ attitudes toward Well-Being for their work. Results of multiple regression analysis show
also that all variables representing the important requirements of employees' well-being. These variables are ranked according to their importance and they reflect that most teaching staff members have positive attitudes toward the following dimensions of psychological capital (see table 6): Feeling confident in representing the faculty in meetings which take place with the university’s administration (0.242), The ability to achieve things that require exerting efforts (0.232), Having Self-efficacy when rendering services in setting objectives inside the faculty (0.231), Permanent feeling of success (0.223),...Permanent looking forward to the good side at work (0.217), The ability to evade any obstacle or a problem at work and moving to another target (0.211), Expecting the best when matters are vague (0.209), and The ability of think of several ways to overcome any obstacle (0.131).

Table 6 Relationship between Psy and employees' well-being (outputs of multiple regression analysis)

<table>
<thead>
<tr>
<th>Psychological capital dimensions (the most important variables)</th>
<th>Beta</th>
<th>R</th>
<th>R²</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Feeling confident in representing the faculty in meetings which take place with the university’s administration</td>
<td>0.242</td>
<td>0.639</td>
<td>0.408</td>
<td>0.000</td>
</tr>
<tr>
<td>-Having Self-efficacy when rendering services in getting objectives inside the faculty</td>
<td>0.231</td>
<td>0.592</td>
<td>0.350</td>
<td>0.000</td>
</tr>
<tr>
<td>Optimism</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Permanent feeling of success</td>
<td>0.223</td>
<td>0.581</td>
<td>0.337</td>
<td>0.000</td>
</tr>
<tr>
<td>-The ability of think of several ways to overcome any obstacle</td>
<td>0.131</td>
<td>0.466</td>
<td>0.217</td>
<td>0.001</td>
</tr>
<tr>
<td>Resilience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-The ability to evade any obstacle or a problem at work and moving to another target</td>
<td>0.211</td>
<td>0.563</td>
<td>0.317</td>
<td>0.000</td>
</tr>
<tr>
<td>-The ability to achieve things that require exerting efforts</td>
<td>0.232</td>
<td>0.622</td>
<td>0.387</td>
<td>0.000</td>
</tr>
<tr>
<td>Hope:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Permanent looking forward to the good side at work</td>
<td>0.217</td>
<td>0.572</td>
<td>0.327</td>
<td>0.000</td>
</tr>
<tr>
<td>-Expecting the best when matters are vague</td>
<td>0.209</td>
<td>0.541</td>
<td>0.292</td>
<td>0.000</td>
</tr>
<tr>
<td>F value</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of freedom</td>
<td>126.025</td>
<td></td>
<td>8,291</td>
<td></td>
</tr>
</tbody>
</table>
According to the above mentioned findings with respect to the relationship between psychological capital for teaching staff members and employees’ Well-Being, we must reject the second null hypothesis of this study and accept the alternative one. More specifically, there is a significant relationship (P-value - 0.01 according to F-test) between the psychological capital for teaching staff members and employees’ Well-Being, taken together. In addition, we must reject the Same null hypothesis regarding all sub-variables that have significant relationship with psychological capital dimensions taken separately. This finding is consistent with (Shuck et al., 2011; James et al., 2010; Siu, Oi Ling, 2013; Siu, et al, 2014). Hence, the null hypothesis is rejected and the alternative hypothesis is accepted which states that there is a significant relationship between psychological capital for teaching staff members and employees Well-Being.

The relationship between psychological capital dimensions and knowledge sharing

The results indicated in Table (7) show that there is a significant relationship between psychological capital dimensions of teaching staff members as a whole and knowledge sharing among members. The strength of this relationship is 777 according to correlation coefficient in the model R. Psychological capital dimensions for teaching staff members (as a whole) can be interpreted as about .604 (according to R2) of the changes in knowledge sharing among members.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>777(a)</td>
<td>.604</td>
<td>.582</td>
<td>.496</td>
</tr>
</tbody>
</table>

Note: a Predictors: (constant), Self-efficacy, Optimism, Hope, and Resilience'

Results from Table (8) show that the ratio of the two mean squares (F) was 123.916 (p < 0.001). Since the observed significance level was less than 0.001, the four variables influence staff members’ attitudes toward knowledge sharing among members. Results of multiple regression analysis show also that all variables representing the important requirements of knowledge sharing among members.

These eight variables are ranked according to their importance and they reflect that most teaching staff members have positive attitudes toward the following Dimensions of psychological capital (see table 8): Feeling confident in representing the faculty in meetings which take place
with the university’s administration (0.234), Having Self-efficacy when rendering services in setting objectives inside the faculty (0.232), -The ability to achieve things that require exerting efforts (0.231), The ability of think of several ways to overcome any obstacle (0.222), Permanent feeling of success (0.214), Permanent looking -forward to the good side at work (0.202), The ability to evade any obstacle or a problem at work and moving to another target (0.190), and Expecting the best when matters are vague (0.179).

Table 8 Relationship between Psy and knowledge sharing (outputs of multiple regression analysis)

<table>
<thead>
<tr>
<th>psychological capital dimensions j (the most important variables)</th>
<th>Beta</th>
<th>R</th>
<th>R2</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-efficacy:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Feeling confident in representing the faculty in meetings which take place with the university's administration</td>
<td>0.234</td>
<td>0.606</td>
<td>0.367</td>
<td>0.000</td>
</tr>
<tr>
<td>-Having Self-efficacy when rendering services in setting objectives inside the faculty</td>
<td>0.232</td>
<td>0.594</td>
<td>0.353</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Optimism</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Permanent feeling of success</td>
<td>0.214</td>
<td>0.551</td>
<td>0.307</td>
<td>0.000</td>
</tr>
<tr>
<td>-The ability of think of several ways to overcome any obstacle</td>
<td>0.222</td>
<td>0.576</td>
<td>0.332</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Resilience</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-The ability to evade any obstacle or a problem at work and moving to another target</td>
<td>0.190</td>
<td>0.482</td>
<td>0.232</td>
<td>0.001</td>
</tr>
<tr>
<td>-The ability to achieve things that require exerting efforts</td>
<td>0.231</td>
<td>0.592</td>
<td>0.350</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Hope:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Permanent looking forward to the good side at work</td>
<td>0.202</td>
<td>0.542</td>
<td>0.294</td>
<td>0.000</td>
</tr>
<tr>
<td>-Expecting the best when matters are vague</td>
<td>0.179</td>
<td>0.441</td>
<td>0.194</td>
<td>0.001</td>
</tr>
</tbody>
</table>

According to the above mentioned findings with respect to the relationship between psychological capital for teaching staff members and knowledge sharing among members, we must reject the third null hypothesis of this study and accept the alternative one. More specifically, there is a significant relationship (P-value = 0.01 according to F-test)
between the psychological capital for teaching staff members and knowledge sharing among members, taken together. In addition, we must reject the same null hypothesis regarding all sub-variables that have significant relationship with psychological capital dimensions taken separately. This finding is consistent with (Delgado et al, 2011; Chi-Min & Tso-Jen, 2013). Hence, the null hypothesis is rejected and the alternative hypothesis is accepted which states that **there is a significant relationship between psychological capital for teaching staff members and knowledge sharing among members.**

**Results and Recommendations:**

**Results:**

There are a number of general findings that has been gained on the basis of the statistical analysis used in this research. These findings have been classified into the following:

* The psychological capital, knowledge sharing, and well-being concepts are insufficiently adopted by teaching staff members and their university.
* There is a significant difference among university teaching staff members' attitudes towards psychological capital dimensions (self-efficacy, optimism, hope and resilience) according to gender differences.
* There is a significant difference among university teaching staff members’ attitudes towards psychological capital dimensions (self-efficacy, optimism, hope and resilience) according to differences in the faculties in which they work.
* There is a significant relationship between psychological capital dimensions for teaching staff members and employees Well-Being.
* There is a significant relationship between psychological capital dimensions of teaching staff members and knowledge sharing among members
* This findings provide further empirical evidence to support the idea that the resources built from positive Psychological capital are likely to be the mechanism underlying the beneficial effects of positive emotions (enhancing work well-being and knowledge-sharing among academician) across a variety of life domains.
* Generally, this study has provided initial support for the important role that employees’ psychological capital may play in knowledge-sharing and well-being among academician in Kafrelsheikh University. Psychological capital can be developed and leveraged, not only for knowledge-sharing among academician, but also for enhanced their well-being.
Recommendations:
Based on to the results of this research a number of managerial and marketing implications would be drawn. These implications are based on the fact that adapting new management technique such as psychological capital dimensions has become necessary for all teaching staff members’ to achieve the highest level of both teaching staff members’ Well-Being and knowledge sharing in globally challenging circumstances and in gaining competitive edge. Also, it will continue to play a major role in improving university performance. Besides, on the basis of the findings of analyzing the relationship between psychological capital dimensions and both teaching staff members’ Well-Being and knowledge sharing, some recommendations related to developing and improving dimensions of psychological capital are mentioned for increase teaching staff members’ Well-Being and knowledge sharing. These recommendations can be stated as follows:

* Deepening understanding of psychological capital for university teaching staff members and some related concepts such as (knowledge sharing and employees’ Well-Being).
* Deepening understanding of the role of psychological capital of teaching staff members so as to enhance and promote levels of knowledge sharing among teaching staff members.
* The necessity of designing a set of training programmers for all teaching staff members which aim at making them aware of the importance of improving dimensions of intellectual capital.
* The necessity for encouraging and activating the study of points of human strengths and constructive feelings among teaching staff members and improving these points of strengths and constructive feelings.
* The necessity for designing a set of training programmers for all teaching staff members to make them aware of the significance of knowledge sharing among teaching staff members and sharing in research work through the following:
  - Knowledge sharing with other members at the faculty.
  - Members should be participants in the faculty’s activities.
  - Members should exert effort and devote too much time in activities that add knowledge to the faculty.
  - Knowledge shared among members should have a positive effect on member’s performance.
  - Emphasizing that knowledge sharing achieves the highest benefit for the university.
* Turning the university administration attention to the necessity of...
role of psychological capital of teaching staff members so as to enhance and promote levels of knowledge sharing among teaching staff members.

* More empirical research is needed to investigate psychological capital at the different managerial level in universities, either in public or private sectors. Academic people should pay more attention to the factors affecting psychological capital, as well as the consequences that might be caused from it.

* The management must also be supportive in providing conducive environment that encourages collaboration and trust that will lead to knowledge sharing.

* Devoting parts in the courses taught in managerial program in every faculty to psychological capital, knowledge sharing, employees’ Well-Being, and actual practices.

* The importance of rewarding individuals to ensure ongoing contribution in the form of knowledge sharing among organizational members.

* It would be expected that an increase in psychological capital can lessen the burden of stress and anxiety as well as improve the general well-being of an individual.

* In order to increase the level of knowledge sharing among teaching staff members, the promotion committees should count any shared research as a whole for each author

* Future research should consider the implication of including psychological capital in research models.

**Future research works:**

In spite of the fact that the current study attempts to study psychological capital dimensions of teaching staff members, and its relationship with employees’ Well-Being one knowledge sharing among them, the scope of the study, technique used and the results obtained points to other aspects for further future studies. These research works can be summed up as follows: (i) The possibility of confirming the validity of the measures used in the present study concerned with measuring the dimensions of psychological capital and employees’ Well-Being, and knowledge sharing through employing these measures in other institutions such as hotels and hospitals ... etc; (ii) Measuring the level of spreading dimensions of psychological concept among academician from one hand and in service organizations on the other hand; (iii) analyzing and identifying the differences in teaching staff members’ attitudes towards psychological capital dimensions according to differences in university, age and level of
education; (iv) Organization culture and its role in improving psychological capital dimensions.

References


DAMBE, G. and ATSTAJA, D., 2013. Knowledge, Skills and Attitude in
Tourism Industry: Case Study of Latvia. European Integration Studies: Research & Topicalities.


**Edris, Thabet Abd El-Rahman, Abd El-Kader, Ali Ahmed**, Clients’ Attitudes Description towards Realize values determination and its relationship to loyalty to a product's Trade mark, New Horizons forCommercial Studies, Faculty of Commerce, Menufiya University 24, No. 3-4, pp. 9-54.

The Impact of the Psychological Capital Dimensions on Employee Wellbeing and Knowledge Sharing: The Case of Kafrelsheikh University
Ali Ahmed Abdelkader
Ahmed Hossin

89, pp. 997-1019.


The Impact of the Psychological Capital Dimensions on Employee Wellbeing and Knowledge Sharing: The Case of Kafrelsheikh University
Ali Ahmed Abdelkader
Ahmed Hossin

10.1080/13678868.2011.601587.,


Conferences:

Chi-Min Wu, Tso-Jen Chen (2013)" Understanding group psychological Capital at work: Linking shared leadership and knowledge sharing", The 2013 International Conference on Business and Information (BA12013) is to be held at Bali, Indonesia.
The Impact of the Psychological Capital Dimensions on Employee Wellbeing and Knowledge Sharing: The Case of Kafrelsheikh University
Ali Ahmed Abdelkader
Ahmed Hossin

Appendix A
Study population of Kafrelsheikh university teaching staff members

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Prof. emeritus</th>
<th>Prof.</th>
<th>Aassoc Prof.</th>
<th>Lecture</th>
<th>Teaching assistant</th>
<th>Demonstrator</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>115</td>
<td>46</td>
<td>48</td>
<td>50</td>
<td>29</td>
<td>7</td>
<td>295</td>
</tr>
<tr>
<td>Education</td>
<td>9</td>
<td>10</td>
<td>13</td>
<td>26</td>
<td>5</td>
<td>12</td>
<td>75</td>
</tr>
<tr>
<td>Veterinary</td>
<td>9</td>
<td>46</td>
<td>13</td>
<td>34</td>
<td>21</td>
<td>7</td>
<td>130</td>
</tr>
<tr>
<td>Medicine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
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<td>2</td>
<td>25</td>
<td>26</td>
<td>45</td>
<td>103</td>
</tr>
<tr>
<td>Commerce</td>
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<td>4</td>
<td>3</td>
<td>15</td>
<td>23</td>
<td>27</td>
<td>73</td>
</tr>
<tr>
<td>Specific</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>38</td>
<td>28</td>
<td>2</td>
<td>74</td>
</tr>
<tr>
<td>Education</td>
<td>Arts</td>
<td>10</td>
<td>4</td>
<td>19</td>
<td>54</td>
<td>25</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Physical</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>5</td>
<td>4_</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
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<td>17</td>
<td>21</td>
<td>27</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
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<td>274</td>
<td>129</td>
<td>138</td>
<td>161</td>
<td>1020</td>
</tr>
</tbody>
</table>

Source: Administrative information Centre, Kafrelsheikh University, 2012-2013
### Appendix B
Distribution on colleges and position under study

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Prof. Emeritus</th>
<th>Prof.</th>
<th>Assoc. Prof.</th>
<th>Lecture, Teaching, assistant</th>
<th>Demonstrator</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>35</td>
<td>14</td>
<td>15</td>
<td>17</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Education</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td>Veterinary Medicine</td>
<td>3</td>
<td>15</td>
<td>4</td>
<td>11</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Engineering</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Commerce</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>8</td>
<td>9</td>
</tr>
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<td>1</td>
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<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Arts</td>
<td>3</td>
<td>1</td>
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<td>2</td>
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<tr>
<td>Science</td>
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<td>5</td>
<td>6</td>
<td>7</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>49</strong></td>
<td><strong>43</strong></td>
<td><strong>40</strong></td>
<td><strong>86</strong></td>
<td><strong>55</strong></td>
<td><strong>47</strong></td>
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