Hope and Gratitude: Potential Springboard to Develop Work Values of Young Adult Learners

Lorizza Mae Posadas-Gacott, MA, RGC
Puerto Princesa School of Arts and Trades, Puerto Princesa City, Palawan

ARTICLE INFORMATION

Article History:
Received: November 4, 2017
Received in revised form: October 15, 2018
Accepted: November 27, 2018

Keywords:
gratitude, hope, work values, young adult learners, 21st century skills

*Corresponding author: Lorizza Mae Posadas-Gacott (azzirol@gmail.com)

ABSTRACT

This action research explored the origin of underdeveloped work values among young adult learners. With the aim of designing appropriate intervention, the researcher anchored on Plan-Act-Reflect Paradigm, and gathered qualitative data using observation and interview among 20 young adult learners enrolled in technical vocational education and training (TVET) institution. Qualitative analysis revealed that perceived limitations and hopeless mindset characterized by lack of agency and pathways thinking interfere with the development and demonstration of positive work values. Grounding on Hope Theory, an intervention was designed to incorporate hope-fostering activities to personality development course, locally termed as Individual Excellence Program. Analysis of post-intervention evaluation through participants’ reflective writing indicates heightened self-awareness and reframed perspective. The theme, gratitude, also emerged as potential factor to foster desirable work values. Integration of positive psychology concepts in education and TVET curriculum is therefore suggested to educators, policy-makers and school counselors.

Introduction

Employers worldwide highly recognize the significance of positive work values. According to the International Labor Organization or ILO (2015), the development of positive work values is highly noteworthy as it is one of the determinants of employability and workforce competence. Since work values are related to the success of industries, employers need to ensure that a potential job candidate possesses not only the skills but the right work attitude as well (Salahudin, Alwi, Baharuddin, & Halimat, 2016). Thus, in education, the development of work values merits prioritizing because it influences job performance that ultimately leads to employee productivity and organizational success (Salahudin, Alwi, Baharuddin, & Halimat, 2016).
The components of work values remain a debate at present. Though various attempts were made to arrive at the characterization of work values, conceptual and operational definitions remain distinct and inconsistent. Despite conflicting assertions, Geren (2012) theoretically defined work values as a dedication to the value and significance of hard work. Work values are also conceived as a collection of attitudes and beliefs related to work behavior such as self-reliance, morality, leisure, hard work, centrality of work, time-management, and delay of gratification (Van Ness, Melinsky, Buff & Seifert, 2010). These array of beliefs are also interrelated to the development of other skills needed at work such as technical-vocational, professional, and core work skills (Brewer & Comyn, 2015).

Moreover, the enhancement of work values is integrated with teaching of core work skills in the learning institutions. In western countries, particularly in the United States, the core work skills are known as 21st century skills, which entail the applied skills like critical thinking, oral and written communication, teamwork, diversity, information technology, leadership and innovation, life-long learning or self-direction, professionalism, work ethic, and social responsibility. In the Philippines, core work skills are called basic competencies, which are commonly part of the curriculum of technical vocational institutions.

Role of Technical Vocational Education and Training in Developing Work Values: Global to Local Perspectives

Technical Vocational Education and Training (TVET) plays a vital role in preparing the learners for lifelong learning and productivity. Aside from technical skills, TVET is internationally recognized in fostering 21st century skills. It also aims to counteract the declining work values that seem to negatively affect workforce’s productivity (Van Ness, Melinsky, Buff & Seifert, 2010). Although substantial literature emphasizes the importance of integrating these essential skills in education (Brewer & Comyn, 2015), there is dearth of research-based polices on how work values should be assimilated in TVET. In the Philippines, the Technical Education and Skills Development Authority (TESDA) requires the integration of 21st century skills in all TVET programs with training regulations (TR) through basic competencies (ILO, 2015).

Specifically, the unit of competency, “Practice Career Professionalism” tackles the development of work values, and involves the knowledge, skills and attitudes in upholding career growth and advancement among learners. It aims to integrate personal objectives with organizational goals; set and meet work priorities, and maintain professional growth and development. The underpinning knowledge includes work values and ethics, company procedures and standards, basic rights, gender sensitivity, and personal hygiene practices. Furthermore, many TVET schools in the Philippines go further than the minimum TR standards (ILO, 2015) by expanding skills acquired in basic competencies through integrating character or personality development program in the curriculum. Like other TVET institutions in the country, the school where the study was conducted implemented the same program since 2014. As an evidence-based policy, the identified needs of both industry and students determined the subject’s contents.

Initial Intervention to Improve Work Values of TVET Learners and Problems Encountered

As part of the plan-act-reflect cycle and curriculum evaluation, the school regularly solicits feedback from industry regarding student performances. As reported, selected industries were not satisfied with communication skills, self-confidence and work values of the TVET graduates (Posadas, 2014). Thus, interventions like
English Proficiency and Individual Excellence Program (IEP) were implemented to address the limitations. The latter intervention aimed to promote self-awareness by knowing one’s purpose, formulating goals, and building self-esteem. Most importantly, it aimed to enhance personality by helping the learners project positive social image and develop positive work values. It was originally offered to two batches of scholars (25 per batch) within a 40-hour duration from 2014 to 2016, as pre-requisite to on-the-job training (OJT). As evaluated, the scholars who had undergone the 40-hour intervention received positive feedback in terms of professionalism, confidence and work values.

With its positive outcome, the IEP was then offered to non-scholars. However, the previously 40-hour program was compressed to only 24 hours because of time restrictions in school’s training calendar. Whereas offering the 40-hour IEP had constructive impact on students’ performance, the 24-hour intervention did not. As evaluated, the sense of commitment, responsibility and determination of students fell short in gaining the confidence of industry supervisors (Posadas, 2014). Thus, the school had to review and revise the existing intervention, without compromising its quality. Before coming up with another intervention however, the root of the problem had to be identified first. Hence, the succeeding exploration served as baseline of the modified intervention.

The Hope Theory and Its Role in Education

Aside from having academic and technical skills, learners need to develop a psychological skill that would help them achieve their goals (Kibby, 2015). Thus, a great body of literature is starting to recognize the role of hope in education, as it is known to breed persistence. Rand and Cheavens (2009) described hope as peoples’ awareness on their ability to identify goals, cultivate particular approaches to achieve these goals (pathways thinking), and initiate and maintain eagerness for using those strategies (agency thinking). Agency indicates will, and pathways indicate the means. In the Philippine context, it is well associated with the maxim, “Kung ayaw may dahilan, kung gusto may paraan” (If people want to accomplish or get something, they will do all means to make it possible. If people want to avoid a certain obligation they will make all kinds of excuses). Because Hope Theory is a concept within positive psychology, it focuses on strength-building rather than dwelling on or resolving failures and weaknesses (Kibby, 2015). To foster hope among students, it is important to tap the resources that they have rather than what they do not have.

Related Studies on Hope

Integrating hope in education needs systemic planning and implementation. In fact, several hope interventions among gradeschool and middle school children have been conducted for the last decade and resulted to optimistic outcomes such as increased self-esteem, self-efficacy, self-worth, better school attendance (Wells, Gilbert, Mahle-Grisez, Newman & Rowell, 2014), optimism, better academic and sports performance, and enhanced life satisfaction and well-being (Bashant, 2016). Hope as a psychological strength, buffers depression and anxiety (Retnowati, Ramadiyanti, Suciati, Sokang & Viola, 2015). High hope facilitates better decisions among children, adolescents and young adults than low hope (Idan & Margalit, 2013), especially when paired with meaningful goals, in a short-term or long-term basis that match their values (Margalit, 2014). Thus, the role of hope could be a paradigm shift in education as it facilitates learning which is favorable to growth and development of the learners (Skyes, 2014; Margalit, 2014).

Moreover, schools play a huge role in providing learning environment that hones hope while considering the learners’ cultural
context. Unlike individualism that supports independent hopes, collectivism promotes hope inspired by group and family goals (Pedrotti, 2011). Hope can also be learned in a non-formal way within a family context (Idan & Margalit, 2013). Since positive experiences and memories are associated with high hope among individuals (Gibson & Barr, 2015), both school and family contexts must provide positive opportunities for hope development.

Hope interventions influence career development as well. In the research of Hirschi, Abessolo and Froidevaux (2014), vocational hope enhanced students’ persistence in the midst of obstacles. Hope empowered the marginalized, disadvantaged and excluded population (Jovanović, 2013), and increased personal agency of youths in stable surroundings (Nalkur, 2009). Conversely, youth in unstable background relate success to fortune and banked on outside factors to be hopeful. Though there have been several hope interventions in the past as facilitated by teachers and school counselors (Marques, Lopez, & Pais-Ribeiro, 2011; Oyserman & Destin, 2010), these interventions were commonly conducted in the Western realm, and mostly applied to learners in the primary and secondary education for five to 18-week duration.

**Gratitude: A Potential Vehicle to Success**

Gratitude is traditionally defined as an act of being appreciative with or without beneficial events. It is an emotional expression wherein individuals recognize the contribution of others on the benefits that they receive (Wilson, 2016). Just like hope, gratitude may serve as vehicle to success as it enhances learning environment, and increases the motivation of students to achieve (Wilson, 2016). According to Howells (2012), the connection between thanking and thinking is linked to motivated learning. On the contrary, ungrateful character might lead to resentful, limiting, and negative thinking, making the individual to be more prone to complaints, frustration, and boredom. It also makes the person lethargic, indifferent, and unable to concentrate and take in information.

Whereas the optimistic impacts of positive psychology concept in educational interventions have been documented in the past, majority of the previous studies were limited to grade schools and middle school learners. Educational interventions integrating positive psychology concepts for young adult learners in relation to the development of work values have not received adequate attention. Likewise, at present, there is a scarcity of available research-based policies that may provide practical inputs in fostering work values among TVET learners. Despite the presence of local intervention as discussed earlier, it seems that the current intervention needs research-based modification. Hence, to provide evidence-based solutions, the enhancement of prior intervention necessitates another baseline examination. It is in this context that the researcher recognizes the importance of investigating the factors contributing to underdeveloped work values of young adult TVET learners, and creating and integrating strategies anchored on Hope Theory to address the underlying issues.

**Purpose of the Research**

In line with the problems identified after the implementation of the initial intervention as discussed above, this action research aimed to explore the reasons behind TVET students’ poor work values (poor sense of commitment, responsibility, and determination); develop and implement an appropriate intervention program to address the identified problem; and evaluate the impact of the intervention program based on students’ accounts.
Methodology

This section discusses the research design, participants, instruments used, research and data collection procedure, and data analysis.

Research Design.

This study carried out an instantaneous inquiry in practice, generating knowledge and measures to improve conditions through designing curriculum and learning activities, making it an Action Research (Creswell, 2012). The nature of this study followed a systematic process. However, different from rigidly formal and highly prescriptive studies, the vital element of this research lies on its purpose of investigating the existing problem in education and classroom setting, followed by organizing, analyzing and interpreting data (Creswell, 2012). Unlike other research designs, it is important to note however, that each phase in this action research ends with a reflection that paved the way to another series of issues or problems that need to be addressed in the proceeding cycle. Hence, the initial findings became the baseline of the intervention plan coined as Individual Excellence Program, followed by its implementation and evaluation, and improvement of the process as the cycle goes on. Accordingly, within learning, the key objective of this action research was to decide ways to enrich the lives of the learners (Mills, 2011).

Research Participants.

Due to the qualitative nature of the study, the researcher purposively chosen who were research participants enrolled in a particular TVET program in the institution where the study was conducted. They are with 18 to 30 years old, and must have taken the basic, common, and core competencies in the regular training program. The researcher came up with 20 young adult learners whose ages ranged from 18 to 28 years old. Majority were high school graduates while the rest did not finish college. There were 11 males and nine female students who participated in the study. All of the participants belonged to families with low socioeconomic status.

Research Instruments.

This action research entailed two periods of gathering qualitative data. Initially, the researcher used observation method and individual interviews to pinpoint the factors influencing the participants’ poor work values. To gather the participants' qualitative evaluation of the program, the researcher used interviews which were also supplemented by participants’ reflective writing. The researcher ensured the richness, robustness, validity and comprehensiveness of the needed qualitative data through source triangulation (Creswell, 2013). Since data gathering transpired in class, the interview was informal, open-ended and conversational. After the participants’ confirmation of the intervention’s personal impact, the researcher probed, “How did the lessons and activities impact you?” Likewise, the researcher demonstrated reliability by meticulous note-taking of observations, searching for similarities and differences across respondents’ accounts, and awareness of data saturation. In addition, the researcher applied respondent validation to safeguard reliability and data authenticity.

Research Procedure.

Anchoring on the Plan-Act-Reflect paradigm, the researcher initially started the planning stage by investigating the origin of the participants’ underdeveloped work values. After establishing the research’s baseline, the researcher planned and conceptualized significant changes to the intervention while ensuring the suitability of the process to the participants. Subsequently, “Act” stage embodied the implementation of the contextualized intervention. It included learning activities designed to address the
Findings and Discussion

The qualitative analysis of data revealed the elements that underlie the participants' underdeveloped work values. The emergent themes and categories as shown in Table 1, provided the basis of the learning activities incorporated in the intervention program that was consequently implemented and evaluated by the participants.

Perceived Limitations: The Underlying Issue behind Underdeveloped Work Values

One global theme emerged as on top of the elements that underlie undeveloped work values. The global theme was derived from the most frequent codes and categories generated from the data. Table 1 shows the organized summary and brief description of theme, supported by exemplars that capture its essence.

The research findings indicate that TVET students are hesitant to perform well because they are hindered by perceived limitations. The apparent

| Table 1 Generated Themes Behind Underdeveloped Work Values of Young Adult Learners |
|---|---|---|---|
| Generated Theme | Responses and Frequency | Codes | Description of Theme |
| Perceived Limitations | I did not even finish formal education and I’m not familiar with what is being done in the actual workplace. I never had any work before. I feel apprehensive when I think about work. (7) | Incomplete formal education | This theme embodies multiple factors that possibly affect confidence, leading to feeling of disempowerment. Past negative experiences make the participants overlook their ability to make changes, thus attributing their current situation to external circumstances. |
| | I came from a broken family. My mother and father separated when I was young. I am like this, maybe because of my family background. (7) | Lack of work experience |
| | I have made a lot of mistakes in the past. It was really shameful because I couldn’t do anything right. I’m afraid to make mistakes at work, so maybe it’s better if I don’t work at all. (7) | Lack of exposure |
| | We’re poor. We earn living by fishing and farming which are not enough for our household. It’s hard and even if you work, it won’t help. Maybe we are just ill-fated.” (9) | Lack of interest at work |
| | | Poverty |
| | | Unfortunate mindset |
limitations may have contributed to the underdeveloped work ethics such as poor sense of commitment, responsibility and determination. The findings also reveal that the underdeveloped work values may be attributed to factors like lack of work experiences and lack of exposure, resulting to low confidence. The participants talk about past negative experiences such as dysfunctional family, past personal mistakes, lack of education and poverty as culprits for feeling disempowered. Moreover, the results show that participants perceive themselves as unfortunate. With this belief, many of them would rather stay at home, passively wait for opportunities, and go back to their previous way of life which according to them are insufficient to provide for family’s needs. Despite their technical education, these external factors remain, while dragging them to apathy and lack of interest at work.

The findings confirm the impact of hopeless mindset to the self-confidence of a person (Gibson & Barr, 2015). The way the participants regard their inability to transcend from the past, poverty, lack of work experience and lack of formal education possibly connotes a state of hopelessness. This confirms previous findings also that hopeless and self-doubting individuals easily get discouraged (Idan & Margalit, 2013; Retnowati, Ramadiyante, Suciatti, Sokang & Viola, 2015). Thus, external conditions become paralyzing, leaving them at risk for not being able to actualize their true potentials.

Furthermore, the result concurs well with Margalit (2014) who noted that lack of hope robs the person the initiative to set and pursue meaningful goals. The participants’ poor sense of commitment, responsibility and determination could be an indicator of failure to create personally meaningful goals. Given the participants' undesirable experiences in the family and personal context, the results are consistent with earlier findings that lack of positive experiences may make the person less confident in facing challenges (Gibson & Barr, 2015).

Additionally, the effect of participants’ social background on personal agency coincides with Nalkur (2009) who noted that young people with unstable background associate their status to luck and external resources, instead of counting on their personal ability to create change. Participants’ belief of being unfortunate could also indicate poverty mindset, a hopeless belief system that magnifies deprivation and failure over progress and benefit (Nalkur, 2009). Likewise, the inability to see their strengths while magnifying their limitations may point out that the participants need to develop their agency and pathways thinking to enable them to become effective agents of change (Rand & Cheavens, 2009).

The Intervention Program Addressing the Root of Underdeveloped Work values

Anchoring on Hope Theory (Rand & Cheavens, 2009), the researcher designed learning activities which incorporated goal-setting, and agency and pathways thinking. Before setting specific, measurable, attainable, realistic and time-bounded targets, they needed to be connected with their own values first to ensure that goals are personally relevant. At first, trainees could hardly list smart goals because they were used to creating broad dreams that are difficult to measure and achieve. Given the proper information and assistance, the participants learned to specify their goals. Furthermore, to develop agency thinking, an individual must tap his strengths and should highlight success over failure (Kibby, 2015). Thus, the researcher had the learners watch documentary films featuring lives of people who remained buoyant despite poverty, physical disabilities, and life adversities. Movie analysis and brainstorming were done to extract personal meanings. Since learning to be hopeful
which used quantitative measures of hope, this program resorted to qualitative impact. Furthermore, the researcher also captured the view of Pedrotti (2011) in considering the background of the learners in creating intervention. After identifying the personal values and origin of underdeveloped work values of participants, the researcher provided learning opportunities where the students could match their goals with what really matters to them. In agreement with Margalit (2014), instilling hope may lead to positive outcome when paired with personally significant goals.

Considering the potential influence of vocational hope to career development, the

<table>
<thead>
<tr>
<th>Generated Theme</th>
<th>Responses and Frequency</th>
<th>Code</th>
<th>Description of Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reframed Perspective</td>
<td>While there is life, there is hope. (14)</td>
<td>Link between life and hope</td>
<td>This theme reflects transformed mindset, from non-agentic and hopeless thinking to active agent of change.</td>
</tr>
<tr>
<td></td>
<td>If they can do it, I can also do it. (10)</td>
<td>Sense of agency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Things can happen if you want to. I will see myself differently from now on. (7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I learned to believe in my own ability. Don’t be idle, learn to strive and be strong. Do not be reluctant, hold on, and fulfill life’s goals. I will succeed through hard work. (7)</td>
<td>Pathways thinking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I am very blessed. I shouldn’t have thought that I’m the most unlucky person because many people have experienced deprivation but it did not limit them to attain their dreams. Poverty is not a limitation. (8)</td>
<td>Transcending poverty mindset</td>
<td></td>
</tr>
<tr>
<td>Self-awareness</td>
<td>When I go out of this room, I will be a changed person, someone who’s not fearful, shy, careless, and worthless. (6)</td>
<td>Acknowledging personal strengths</td>
<td>This theme characterizes positive perception and emotions about oneself that emerged after the intervention.</td>
</tr>
<tr>
<td></td>
<td>You just have to believe in yourself, and you will not lose hope. (9)</td>
<td>Self-confidence</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I was really inspired, as if I woke up from a deep sleep. (4)</td>
<td>Feeling of encouragement</td>
<td></td>
</tr>
<tr>
<td>Gratitude</td>
<td>I thank God for giving me life. He is the source of everything. Without life and God’s blessings, I am nothing. (8)</td>
<td>God’s blessing</td>
<td>This theme mirrors a modified perspective, from focusing on the negative to seeing and appreciating the resources they have.</td>
</tr>
<tr>
<td></td>
<td>I realized that I am blessed for having my family, especially my parents who keep on supporting me in my studies and other endeavors. (8)</td>
<td>Family support</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I feel glad that I have the chance to go to school. I feel thankful for it. There is no reason for me to pity myself for not having things I wanted before. I should work for it. (6)</td>
<td>Opportunity to study</td>
<td></td>
</tr>
</tbody>
</table>
intervention corroborates with Jovanović (2013) who offered that hard work may help the marginalized sector overcome hopelessness.

The Qualitative Impact of the Intervention Program to TVET Students

The implemented intervention was mainly evaluated through the inputs of the participants. The qualitative analysis of participants' reflection reveal how the hope intervention left an impact to them. The emergence of the themes such as reframed perspective and self-awareness is briefly summarized on Table 2. Gratitude, another positive psychology concept, also emerged.

The findings suggest that participants' post-intervention evaluation led to positive consequences such as reframed perspective, heightened self-awareness and emergence of gratitude. Many of them recognize the significance of life as fountain of hope. By recognizing their ability to make changes in their lives, they were able to acknowledge that they have what it takes to succeed. Similarly, they see the life itself not just as a blessing but also an opportunity to improve oneself and transcend from old self. Also, one striking result was the emergence of the third theme, gratitude. This subject includes the recognition of God's grace, appreciation of support system composed by their parents and family. Participants also felt grateful for being in a TVET school. Their accounts confirm that they acknowledge their own talents and skills and everything that they have as a source of strength and hope.

The participants' insights may have probably rooted from observing how marginalized people thrived despite poverty, disability and adversities. Seeing those people prosper despite the deprivation inspired them to recognize their own abilities. The findings support the notion of Retnowati, Ramadiyante, Suciatti, Sokang and Viola (2015) on seeing hope as a psychological strength. The integration of hope-fostering activities in the Individual Excellence Program may have helped the students overcome the feelings of incompetence and anxiety. Consistent with Kibby (2015), personal awareness of the prevailing hopelessness and negativity became the participants' means towards affirmative and hopeful mindframe. Furthermore, the development of strategic and flexible thinking matches well with how Rand and Cheavens (2009) described pathways thinking. It is also interesting to note that the sense of agency (Gibson & Barr, 2015) has emerged as evidenced by the transition from a lethargic mindset to enthusiastic and dynamic outlook.

In addition, the result concurs well with previous findings that a limited, apathetic and indifferent disposition indicates an unappreciative attitude (Howells, 2012). Accordingly, hopelessness combined with ungratefulness, leads to negative complaints, frustration, and boredom, which in turn result to losing interest in the actual world of work (Howells, 2012). This could be the reason why many young adult learners lack the sense of commitment and responsibility needed at work.

The overall findings point to the likelihood that the intervention using positive psychology concepts may have influenced the participants in a desirable way. In fact, incorporating hope-inducing experience and activities in teaching also paved the way to other desirable personal and work values such as self-discipline, determination, smart planning, meeting goals, strategic thinking, openness to experience, and openness to change.

Conclusion and Recommendation

This study intended to explore the reasons and factors that contribute to underdeveloped work values of young adult
Given the fitting intervention, the evidence-based lessons, methods and techniques may lead to desirable progress and outcomes among students. To consider practical implication, TVET program designers, policymakers, educators and school counselors are therefore encouraged to provide necessary research-based educational interventions, while taking into account the potential of hope and gratitude in honing the work values of learners.

The research provides empirical evidence that having a poor sense of commitment, and lack of responsibility and determination among young adult TVET learners may be attributed to hopeless mindset and lack of will and direction. Negative experiences and failure to create personally-meaningful goals may restrict the adult learners’ capacity for self-empowerment, thus leading to lethargic motivation. To buffer such negative effect, the creation of personally-significant goals necessitates awareness of one’s values and personal strengths. Considering the contributive factors of learners’ issues and limitations is compelling because it might offer specific and strategic resolutions that can be incorporated in the program intervention. The contextualized and evidence-based intervention program implemented in this study subsequently prefaces positive outcomes among the participants, as evidenced by their transition from negative to positive mindset, and emergence of personal decision to change. As can be seen, having a hopeful and grateful attitude suggests a good starting point to develop desirable work values.

In addition, the research process and the findings generated from it add to a growing body of literature that supports the integration of positive psychology concepts, particularly the Hope Theory in education and TVET. The findings have important implications to educational programs and policies designed for the enhancement of work values of young adult TVET learners.

This research only explored what lies behind underdeveloped work values, and enhanced and evaluated an intervention in a qualitative stance. In this manner, the study holds considerable limitations. Considering its qualitative nature, it is improper to draw conclusions on associations or causal relationships. Future studies may adopt correlational or causal designs to draw statistical conclusions. Future investigators may also consider self-report measures of work values and hope level. Furthermore, participants were limited to young adult TVET learners who did not have formal education. Thus, the generalizability of the findings to other population and institutions is restricted. Replicating the study with diverse group may be necessary.

References


