Residency training is a crucial time for trainees to obtain medical knowledge regarding their specialty. Often times resident physicians engage in learning through patient care and scheduled didactics. However, it is important to consider that much of resident training also consists of self-based learning. Residents tend to use variety of study resources ranging from traditional physical textbooks to digital platforms (4). Study habits and medical knowledge obtained during residency training likely has lasting impact on post-residency clinical practice (9). Currently, there is limited literature regarding the study and study habits of psychiatry residents.

The goal of this study is to examine and understand psychiatry residents' study habits and preferred educational resources. Having a better understanding of study resources used and preferred by residents can help programs aid residents in studying and provide or recommend quality learning materials. In addition, residents' study habits could be important to help in performance on standardized examinations such as Psychiatry Resident-In-Training Examination (PRITE) and ABPN Board Certification. Previous studies examining learning and reading preferences of surgical and internal medicine residents have found associations with certain preferences and higher scores on In-Training Examination (10,11). These findings suggest that certain learning styles and study habits may be associated with higher examination scores. Assessing how residents learn and the potential impact on test performance can be vital for training.

Methods

This study was approved by Michigan State University IRB. A link to an electronic 20 question survey was emailed to 303 Psychiatry Program Directors or Fellowship Directors that are members of AADPRT (American Association of Directors or Psychiatry Residency Training). These Directors were asked to distribute the link to their trainees and fellows.

Survey questions were selected to collect a wide-range of information including gender, age, training level, ethnicity, study habits including motivation and barriers, digital vs physical resources, preferred resources and preferences in different settings, and more. If “other” was selected, respondents were prompted to include specific details. The target audience was general psychiatry residents at all levels and psychiatry subspecialty fellows.

Results

116 people completed the first question, 69 completed the final question on the survey.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age Range</th>
<th>Top Barriers to Studying</th>
<th>Most Used Resource During Patient Encounter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Age Range</td>
<td>Top Barriers to Studying</td>
<td>Most Used Resource During Patient Encounter</td>
</tr>
<tr>
<td>Male</td>
<td>20-30</td>
<td>Time</td>
<td>Physical</td>
</tr>
<tr>
<td>Female</td>
<td>31-40</td>
<td>Fatigue</td>
<td>DSM</td>
</tr>
<tr>
<td>Non-Binary/Female Gender</td>
<td>41-50</td>
<td>Clinical Duties</td>
<td>UpToDate</td>
</tr>
</tbody>
</table>

Discussion

To our knowledge, this is the only survey study to assess psychiatry residents' study habits looking at where, when and how much residents study as well as preferred educational resources across programs. Most of the residents surveyed spent about 1-3 hours studying in a usual week. Most residents reported spending less time studying outside of work hours and patient encounters. The most common motivator for studying was clinical encounter. This aligns with our findings that most of resident studying tends to occur during work hours and patient encounters. However, interestingly, when asked about most common study location, most residents indicated they mostly study at home compared to at work. This finding differs with above reports that most residents spend less time studying outside of work hours. This difference could be due to more remote work and telehealth being conducted due to the Covid pandemic.

Residents we surveyed reported using traditional educational resources such as textbooks, didactics and journals, as well as electronic resources. Most residents preferred reporting physical textbooks to digital textbooks. This finding was consistent in all age brackets surveyed. A prior study also found a preference for physical resources compared to digital among psychiatry residents. This study showed a preference for paper formats for note taking and reading primarily due to sensory experience (5,6).

Interestingly, although residents appeared to prefer physical textbooks, the most commonly used resource was reported to be UpToDate, which is a digital platform. The other most commonly used resources were Stahl’s and DSM-5. These resources were also reported to be the top three most trusted resources and the top three resources residents said they wanted programs to provide. When asked about go-to resource during patient encounters, most people reported using Stahl’s for psychopharmacology resource, DSM-5 for diagnosis resource, and UpToDate for management resource. Regarding digital resources, residents rated UpToDate, DSM 5 and Google as most helpful. Social media had highest rating of not being helpful.

Multiple prior studies (5,6) showed that residents favored electronic and digital resources for learning. Notably, UpToDate was reported to be the most used and effective resource among residents (6) similar to our study.

One aspect of the survey was to determine what residents throughout the country considered to be barriers to their studying. As mentioned in the results, the largest percentage of residents stated that time was the greatest barrier followed by fatigue. Interestingly, while nearly 25% of respondents stated that time was their biggest barrier it was only 18% who stated that clinical duties was a barrier. In addition to this, the majority of respondents stated that they did not have a primary caregiver role so this elicits the question of what other tasks could be interfering. One aspect that this survey did not assess is the potential for administrative duties and how this could be impacting learning. A previous study has demonstrated that 46% of residents stated a barrier was time due to clinical duties and 41% said spending time with family and friends. Another alarming trend is that fatigue and burnout, two separate options, combined make nearly one third of all reported barriers. These very important topics should be investigated further.

There are limitations to our study. This study is based on residents’ self-reported data, which may be confounded by recall bias. Additionally, survey request were sent to 303 Psychiatry training programs, it is unclear how many different programs are represented by this data. Also, this is a small sample size compared to the total number of psychiatry residents and fellows (approximately 7,300 individuals). Consequently, it is unclear whether our findings can be applied broadly across residency specialties. Also, in our study 116 respondents started the survey, however only 69 completed the entire survey, suggesting that survey was too lengthy or of limited interest about half of those who started the survey. There is likely a selection bias, with people who chose to start the survey and then also people who chose to complete the survey.

As learning needs evolve, an understanding of the current trends and habits will be important to guide procurement of resources for trainees. Our study showed that while most residents prefer traditional textbooks for studying, digital resources remain the most used. This is likely because most of the learning occurs at the point of clinical encounter as is shown in this study. Programs will be well positioned by providing both digital resources that can be used for examination as well as physical textbooks for more encounters as well as physical textbooks for more encounters as well as physical textbooks for more encounters.

Furthermore, our study showed that time was the greatest barrier to studying. It is unclear if this lack of time is primarily due to clinical or administrative duties inherent to training or due to outside influences. It will be useful to study this further to elucidate potential ways to increase availability of time for studying. Lastly, it will be important to study the effectiveness of the different resources utilized in impartation and retention of knowledge, especially how this will impact test scores and quality clinical practice.